

HESPERIA: SUPPLEMENT XXI

**EXCAVATIONS AT
PYLOS IN ELIS**



**BY
JOHN E. COLEMAN**

**WITH A CONTRIBUTION BY
KATHERINE ABRAMOVITZ**

**AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS
PRINCETON, NEW JERSEY**

1986

Library of Congress Cataloging-in-Publication Data

Coleman, John E., 1940-

Excavations at Pylos in Elis.

(Hesperia. Supplement ; 21)

Bibliography: p.

Includes index.

1. Pylos Site (Ēleia, Greece) 2. Greece—Antiquities. 3. Ēleia (Greece)—Antiquities. 4. Excavations (Archaeology)—Greece—Ēleia. I. Abramovitz, Katherine. II. Title. III. Series: Hesperia (Princeton, N.J.). Supplement ; 21.

DF261.P94C64 1986 938'.8 86-20562

ISBN 0-87661-521-3

PREFACE

The project described here was a rescue operation undertaken at very short notice. The excavators were not even aware of the existence of Pylos in Elis six months before the expedition took to the field. Limitations of time and funds necessitated some hard choices, not only during actual excavation but also subsequently during study of the finds and preparation of this final report. A guiding aim throughout was to provide a summary picture of all periods of occupation so that as complete as possible a history of the site would be available to the scholarly world. At an early stage of the work we also judged that the remains of the Classical period were worthy of the greatest and most detailed attention, since it was undoubtedly at that time that Elean Pylos was at its most flourishing. Given the need for such selectivity, it is some consolation that, although much of the site is now underwater, all the movable finds of any importance are still available for further study in the new Archaeological Museum at Olympia. Hence, some material omitted from the present report, such as the human and animal bones, may yet receive the attention it deserves. In addition, other material given cursory or inadequate treatment for lack of scholarly expertise, such as the artifacts of flaked stone, may be further studied by specialists if occasion arises.

The basic records of all the work are on file at Cornell University, where they may be freely consulted. A duplicate set of the original excavation inventory cards of pottery and objects, which give information on some artifacts mentioned in this report but not described in detail, is also available at the American School of Classical Studies at Athens. The inventory numbers of the pieces described on these cards are given in parentheses in the catalogues published below: items of pottery are prefaced by AP, other objects by AO.

Identification and study of finds was a collaborative effort, and the excavation coins were no exception. Almost all were first identified and described by Elizabeth G. Caskey in 1968. Subsequently, Joan E. Fisher looked at photographs of the Greek and Roman coins included in the publication (**D1–D6**, **E1–E4**, **E11–E14**, **E43–E47**), identified and described some of them, corrected the identifications and descriptions of others, and provided further information on comparative material, including references to specimens in the collections of the American Numismatic Society in New York. Orestes H. Zervos also gave an opinion on two Greek coins (**D2**, **D5**), and Philip Grierson provided identifications and descriptions of the Frankish and Byzantine coins (**F1–F4**), again from photographs. The coins have not been weighed, and some of them, particularly the rare **E47**, might repay further examination at first hand by a numismatist. The form of the catalogue entries of coins has been made to conform as far as possible to that of the other artifacts as an aid to the general reader.

The project would not have been successfully completed without the participation, assistance, and financial support of many institutions and people. Details of many of these contributions are given in the Introduction (Chapter I). I should like to take the opportunity here to mention the names of and offer special thanks to the following: the University of Colorado, and particularly its Department of Classics, for sponsorship and support; the National Endowment for the Humanities for making the project possible at all; the American Philosophical Society, the American Council of Learned Societies, and Cornell University for grants-in-aid at various times; the staff of the American School of Classical Studies

at Athens, including Richard H. Howland, former Director of the Managing Committee, Henry S. Robinson, former Director of the School, James R. McCredie, his successor, and Charles K. Williams, II, Director of the Corinth Excavations; the staff of the 7th Ephorate of Antiquities, including George Papathanasopoulos, the former Ephor, Theodora Karageorga, his immediate successor, K. Tsakos, the current Ephor, K. Zachos, current Epime-litis, and A. Douzogli, former Assistant; Nicholas Yialouris, who encouraged the work in its planning stages; Petros G. Themelis for informative conversations about the site and for permission to re-examine finds from his trial excavations of 1964; John A. Sakellarakis for helpful comments during a visit to the site in January, 1968; I. Tsakonas of Agrapidochori, who eagerly put his knowledge of local antiquities at our disposal; the members of the excavation staff of 1968, mentioned individually below (footnote 5, p. 2 below); Roger L. Holzen for help with the plans in the fall of 1968; Anne Steiner for work on the excavation records in the spring of 1970 at Bryn Mawr College; Professor and Mrs. Russell T. Scott for drawings of pottery in the summer of 1971; Marilyn A. Ross for drawings of Geometric and Archaic pottery in the summer of 1971 and for preparing these for publication during the following fall; Gail Less for finishing and inking many of the other drawings; former Cornell undergraduate and graduate students Constance J. Sheldon, Pauline M. Caputi, Celia M. Szarejko, Ruth E. Palmer, Rachel Sternberg, Kay C. Georgi, and Douglas P. Julius for work on finds, or on the manuscript or illustrations of this report; Lucy Talcott for comments on local Peloponnesian red-figured pottery; Joan E. Fisher for help with the Greek and Roman coins; Orestes H. Zervos for help with two Greek coins; Philip Grierson for help with the Byzantine and Frankish coins and for commenting on the manuscript of Part F; Judith E. Herrin for comments on the manuscript of Part F; Thomas D. Boyd for comments on parts of the final manuscript of architectural interest and for drawing my attention to the existence of flaked-stone tools of Classical date at other sites; Werner Gauer for information about comparable pottery from Olympia; Frederick O. Waage for information on Roman pottery; Michael L. Katzev for helpful discussion of the Geometric ship pictured on **B1**; Wayles E. Browne for help with bibliography on Slavic names; Yasemin G. Arnold for preparing an index for this volume; C. W. J. Eliot for helping obtain maps and topographical information and generally for his advice and expertise; Jerome Sperling for putting at our disposal his experience both of excavating and of Elis; Elizabeth G. Caskey, whose skill, energy, and enthusiasm were a constant source of encouragement in the field; and Katherine Abramowitz, whose assistance was invaluable at many stages of the project and went far beyond her joint authorship of Part C.

This report was essentially completed in the fall of 1981, and only a few changes and additions have since been made, notably with respect to the discussion of flaked-stone tools in Part A and the commentary on Graves 26–30 in Part G.

JOHN E. COLEMAN

TABLE OF CONTENTS

PREFACE	iii
LIST OF ILLUSTRATIONS.	vii
ABBREVIATIONS.	xi
BIBLIOGRAPHY	xiii
I. INTRODUCTION	
HISTORY OF EXCAVATIONS AND STUDIES	1
GENERAL DESCRIPTION.	3
ARCHAEOLOGICAL AND HISTORICAL SUMMARY	5
II. THE FINDS	
PART A. MIDDLE HELLADIC.	11
Catalogue	12
PART B. GEOMETRIC.	18
Catalogue	18
Commentary.	32
PART C. ARCHAIC, by John E. Coleman and Katherine Abramovitz	34
Catalogue	35
Commentary.	64
PART D. CLASSICAL	66
1. Areas B and E	69
2. Area C	81
3. Areas A, D, and G	88
4. Area F 4	89
5. Area F 5	91
6. Area K	92
Catalogue	93
PART E. ROMAN	117
1. Area F 3	117
Catalogue	121
2. Area F 2: Cemetery	122
Southwest Group	125
Northeast Group	127
Catalogue	131
Objects not found in Graves: Catalogue	136
PART F. BYZANTINE OR FRANKISH	139
Catalogue	144
Commentary.	149

PART G. OTHER GRAVES	150
Commentary.	151
APPENDIX 1. ANCIENT TESTIMONIA	155
APPENDIX 2. IDENTIFICATION OF THE SITE	161
CONCORDANCES	
“AO” Numbers.	167
“AP” Numbers	169
“II” Numbers	170
INDEX	171
MAPS	
FIGURES	
PLATES	

LIST OF ILLUSTRATIONS

TEXT ILLUSTRATIONS	PAGE
1. Middle Helladic Pottery	13
2. Geometric Pottery: Fine-ware Kraters	21
3. Geometric Pottery: Miscellaneous Fine Ware	25
4. Geometric Pottery: Fine-ware Kantharoi and Cups	27
5. Geometric Pottery: Handmade Coarse Ware.	31
6. Archaic Pottery: Fine, Black and Plain (Elean) Kraters	37
7. Archaic Pottery: Fine-ware Bowls	41
8. Archaic Pottery: Miscellaneous Fine Ware	44
9. Archaic Pottery: Fine-ware Plates	45
10. Archaic Pottery: Fine-ware Jugs, Aryballos, and Pyxides.	51
11. Archaic Pottery: Fine-ware Kantharoi and Cups	54
12. Archaic Pottery: Fine-ware Kantharoi and Teacup(?)	55
13. Alternative Plans of Areas B-E with Structures partly Reconstructed	69
14. Plan of Area C with Structures partly Reconstructed	81
15. Area C, Room 7, North Half: Schematic Section looking North	84
16. Plan of House in Area F 4	90
17. Plan of House in Area F 5	91
18. Profiles of Classical Lamps.	99
19. Spoollike Weights	101
20. Classical Tiles and Pottery (Coarse Ware)	105
21. Classical Pottery (Fine Ware) and Archaic Inscribed Fragment	111
22. Plan of Area F 3	118
23. Plan of Area F 2: Cemetery, Southwest Group	126
24. Plan of Area F 2: Cemetery, Northeast Group	128
25. Roman Pottery and Glass	133
26. Plan of Byzantine or Frankish House in Area D	140
27. Byzantine or Frankish Pottery and Stone Button	146

MAPS

1. Elis
2. Armatova and Vicinity
3. Excavated Areas
4. Hilltop: Excavated Areas and Trenches

FIGURES

1. Plan of Area A, Eastern End
2. Plan of Areas B-E
3. Plan of Area C
4. Plan of Areas F 2 and F 4
5. Schematic Sections of Wells
 - a. Geometric
 - b. Archaic
 - c. Classical: Well 8 in Area C
 - d. Classical: Well in Area F 4

PLATES

1. a. The Ladon River and Armatova from the Southwest, Mt. Sandameriotiko (Mt. Skollion) in the Background
b. Armatova and the Peneios Valley, from the Southeast
2. a. Armatova and the Confluence of the Ladon and Peneios Rivers from the Southwest
b. The Peneios Valley from the Northeast, Armatova in the Middle Ground
c. The Peneios Valley and the "Northeast Plateau", from the Southwest
d. The Peneios Valley looking northeast from Armatova
3. a. The Western End of Armatova from the West
b. The Eroded Northwestern Edge of Armatova from the Southwest
c. The Peneios Valley from the East as Viewed from Armatova, the Dam at Kendron Visible in the Distance
d. Same View as c, in 1970 after the Partial Filling of the Storage Lake
4. a. "Tymbos II" (Themelis) from the Southwest
b. Geometric Well from the West
c. "Tymbos I" (Themelis) to Left of House, from the Northeast
d. The Northwest Edge of Armatova from the Northwest, the Geometric Well near the Center
e. The Geometric Well from the West-northwest
f. The Geometric Well during Excavation from above, South Side
5. Areas B-E
a. General View from the Northeast during Excavation
b. Same View as a, Excavation Completed: House B, Foreground, and House C
c. Partial View from the Southwest: House C, Foreground, and House B
d. Southwestern Part from the East: House C at Right, Structure D at Left
6. Areas B-E
a. Partial View from the Southwest: House C, Foreground, and House B
b. Partial View from the Southeast: House C, Center, and House B
c. Structure D: Room 21 from the Northwest
d. House A: Room 1 from the Northwest
e. Courtyard 12 from the Northeast
f. Structure D: Walls AE and AF from the Northeast. Room 21, Background
7. Area C
a. General View from the Northwest: House A, Center. Houses B and C, Background
b. Central Part from the Northwest: House A. Room 4, Foreground
8. Area C
a. House A: Walls P and Q from the North
b. Well 8 from the North
c. Pit 1, Paved with Tiles, from the South
d. House C: Room 12 from the Southeast
e. Room 7, before Clearing, from the North-northeast
f. Room 7 from the South
9. a. Area F 4: Classical House from the West
b. Area F 4: Well from the East
c. Area F 5: Wall A and Paving, from the West
d. Area F 5: General View from the North. Grave 1, Foreground
e. Area F 5: Grave 1 from the West
f. Area K: Grave 2 from the West. Possible Tile Grave, Foreground
10. Area F 3
a. Trench 1 from the West
b. Trench 1, Wall A from the North

- c. Trench 7, Grave 5 from the Southeast
- d. Trench 2, Circular Structure, from the Southeast
- e. Trench 6, Southwest Part from the Northeast
- f. Trench 6, Graves 3 and 4 from the Northeast
- 11. Area F 2
 - a. The Archaic Well and Graves of the Roman Period, from the North
 - b. The Archaic Well from above, South Side
 - c. View from Armatova toward the Northeast
 - d. Grave 6 from the South
 - e. Grave 7 from the Northwest
 - f. Graves 12–15 and 20, from the North
- 12. Area F 2, Roman Cemetery
 - a. Grave 8 from the North
 - b. Grave 9 from the South
 - c. Grave 10 from the North
 - d. Grave 11 before Removal of the Cover, from the Northwest
 - e. Grave 11 from the Northeast
 - f. Grave 12 from the North
- 13. Area F 2, Roman Cemetery
 - a. Grave 13 from the North
 - b. Grave 16 from the Southwest
 - c. Grave 17 before Removal of Cover Tiles, from the Southeast
 - d. Grave 17 from the Northeast
 - e. Grave 18 from the North
 - f. Grave 19 from the North
- 14. a. Area F 2: Grave 20 from the West
 - b. Area F 2: Grave 22 from the Northwest
 - c. House of the Byzantine or Frankish Period, from the East
- 15. House of the Byzantine or Frankish Period
 - a. Initial Trenches from the South. Trench D9, Left Foreground
 - b. Room 1 partially cleared, from the South
 - c. Room 1 from the North
 - d. Room 2 from the Northwest
 - e. Room 2, Southwest Corner from the North
- 16. a. Grave 23 from the East
 - b. Byzantine or Frankish house, Room 3 from the East. Blocked Doorway and Tile-covered Burial (Grave 24) beneath Floor
 - c. Grave 24 with Cover, from the East
 - d. Grave 24 from the East
 - e. Grave 25 from the West
 - f. Grave 25, Upper Layer of Cover from the North
 - g. Grave 25, Lower Layer of Cover from the North
- 17. Area A
 - a. General View from the West
 - b. Eastern End of the Hill from the Northeast. Grave 29, Foreground
 - c. Grave 26 from the West. Middle Helladic Deposit immediately to the East
 - d. Grave 27 from the West
 - e. Grave 30, Cover from the East
 - f. Grave 30 from the East

18. a. Area A, Grave 28 from the Southeast
- b. Area A, Grave 29 from the East
- c. Limestone Block in a Field East of Armatova
- d. Bridge, probably Recent, East of Armatova; from the Southeast
- e. Area A, Grave 29, Cover from the South
- f. Ancient Remains Visible in a Road Cutting North of Agrapidochori, from the North
19. Middle Helladic Pottery
20. Middle Helladic Pottery and Objects of Chipped Stone. Byzantine or Frankish Button
- 21–23. Geometric Pottery
24. Geometric Pottery and Objects of Terracotta
- 25–35. Archaic Pottery
36. Archaic Coarse Pottery and Objects of Terracotta
37. Objects of Bronze and Lead
38. Classical Objects of Iron
39. Terracotta Spoollike Weights
40. Classical Terracotta Objects and Tiles
41. Classical Objects and Roman(?) Bone Pin
- 42–46. Classical Pottery
47. Archaic and Classical Pottery
48. Classical Pottery. Terracotta Tile of the Roman Period from Grave 12
49. Classical Pottery and Archaic Inscribed Fragment
50. Objects of the Roman Period: Bronze, Iron, Glass, and Terracotta
51. Pottery from Graves of the Roman Period
52. 4th-century Sherd. Objects of the Roman and Byzantine or Frankish Periods
53. Objects and Pottery of the Byzantine or Frankish Period
54. Coins of Various Periods: Silver, Billon, Bronze

ABBREVIATIONS

D.	= diameter	m.	= meter
dim.	= dimension	max.	= maximum
est.	= estimated	pres.	= preserved
gm.	= gram	TC	= terracotta
H.	= height	W.	= width
L.	= length		

Note: There is a separate catalogue for each Part. The catalogue numbers are preceded by letters: A for those items catalogued in Part A, B for those catalogued in Part B, etc. All dimensions in the catalogues are in meters.

ABBREVIATIONS OF PERIODICALS

<i>AJA</i>	= <i>American Journal of Archaeology</i>
Ἀρχ' Ἐφ	= Ἀρχαιολογικὴ Ἐφημερίς
<i>AAA</i>	= <i>Athens Annals of Archaeology</i>
<i>AthMitt</i>	= <i>Mitteilungen des deutschen Archäologischen Instituts,</i> <i>Athenische Abteilung</i>
<i>BSA</i>	= <i>The Annual of the British School at Athens</i>
<i>BCH</i>	= <i>Bulletin de correspondance hellénique</i>
Δελτ	= Ἀρχαιολογικὸν Δελτίον
<i>Jahrb</i>	= <i>Jahrbuch des [K.] Deutschen Archäologischen Instituts</i>
<i>JFA</i>	= <i>Journal of Field Archaeology</i>
<i>JHS</i>	= <i>Journal of Hellenic Studies</i>
<i>Olympiabericht</i>	= <i>Bericht über die Ausgrabungen in Olympia</i>
Πρακτικά	= Πρακτικὰ τῆς ἐν Ἀρχαιολογικῇ Ἐταιρείᾳ
<i>PW</i>	= <i>Pauly-Wissowa, Real-Encyclopädie der klassischen Altertums-</i> <i>wissenschaft</i>

BIBLIOGRAPHY

- Adamsheck, B. (1979), *Kenchreai*, IV, *The Pottery*, Leiden
- Arias, P. E., M. Hirmer, and B. B. Shefton (1962), *A History of Greek Vase Painting*, London
- Backe-Forsberg, Y. (1978), "The Tiles from B 5 and B 8," in *Excavations in the Barbouna Area at Asine* (*Boreas* 4, fasc. 2), I. and R. Hägg, edd., Uppsala, pp. 121–127
- Bakalakis, G. (1964), «'Ανασκαφή Δίου», *Δελτ* 19, B' 3 [1967], pp. 344–348
- Benton, S. (1953), "Further Excavations at Aetos," *BSA* 48, pp. 255–361
- Boardman, J. (1970), *Greek Gems and Finger Rings*, New York
- Boardman, J., and J. Hayes (1966), *Excavations at Tocra 1963–1965, The Archaic Deposits I* (British School of Archaeology at Athens, *Supplementary Volume* No. 4), Oxford
- Bölte, F. (1937), "Olenie Petre," in *PW* XVII, ii, cols. 2433–2434
- Boyd, T. D., and W. W. Rudolph (1978), "Excavations at Porto Cheli and Vicinity. Preliminary Report IV: The Lower Town of Halieis, 1970–1977," *Hesperia* 47, pp. 333–355
- Brann, E. T. (1962), *The Athenian Agora*, VIII, *Late Geometric and Protoattic Pottery*, Princeton
- Broneer, O. (1930), *Corinth*, IV, ii, *Terracotta Lamps*, Cambridge, Mass.
- (1977), *Isthmia*, III, *Terracotta Lamps*, Princeton
- Bruneau, P. (1971), "Lamps corinthiennes," *BCH* 95, pp. 437–501
- Bursian, K. (1868–1872), *Die Geographie von Griechenland* II, Leipzig
- Callipolitis-Feytmans, D. (1962), "Évolution du plat corinthien," *BCH* 86, pp. 117–164
- Carson, R. A. G., P. V. Hill, and J. P. C. Kent (1969), *Late Roman Coinage, A.D. 324–498*, London
- Chavaillon, J. and N., and F. Hours (1967), "Industries paléolithiques de l'Élide I: Région d'Amalias," *BCH* 91, pp. 151–201
- (1969), "Industries paléolithiques de l'Élide II: Région du Kastron," *BCH* 93, pp. 97–151
- Coldstream, J. N. (1968), *Greek Geometric Pottery*, London
- Coleman, J. E. (1968), "Archaic Pottery from Pylos in Elis," *AAA* I, pp. 285–288
- (1969), "Elean Pylos, 1968," *Δελτ* 24, B' 1 [1970], pp. 155–161
- (1971), "Elean Pylos," *Δελτ* 26, B' 1 [1974], p. 147
- (1983), "Pylos in Elis, Greece," *Archaeology* 36, pp. 68–69, 76
- Courbin, P. (1966), *La céramique géométrique de l'Argolide*, Paris
- Curtius, E. (1851–1852), *Peloponnesos*, Gotha
- Curtius, E., and F. Adler (1890), *Olympia*, IV, *Die Bronzen*, Berlin
- Davidson, G. R. (1952), *Corinth*, XII, *The Minor Objects*, Princeton
- Davidson, G. R., and D. B. Thompson (1943), *Hesperia*, Suppl. VII, *Small Objects from the Pnyx: I*, Baltimore
- Dressel, H. (1904), "Erwerbungen des königlichen Münzcabinet in den Jahren 1898–1900 (antike Münzen)," *Zeitschrift für Numismatik* 24, pp. 17–104
- Diodorus Siculus, *Βιβλιοθήκη Ἱστορική*, Book III (F. Vogel, ed., Leipzig 1893)
- Dunbabin, T. J. (1962), *Perachora* II, Oxford
- Eilmann, R. (1941), "Die 'Südhalle'; keramischer Befund," *Olympiabericht* III, pp. 37–66, in *Jahrb* 56.
- (1944), "Zeitbestimmung," in "Die Badenlage am Kladeos," *Olympiabericht* IV, Berlin, pp. 70–104
- Eilmann, R., and K. Gebauer (1938), *Berlin Antiquarium* (Band 1), *Corpus Vasorum Antiquorum* (Deutschland 2), Munich
- Forrer, L. (1924), *The Weber Collection*, II, *Greek Coins*, London
- Frazer, J. G. (1898), *Pausanias's Description of Greece* IV, London

- Gardner, P., and R. S. Poole (1887), *A Catalogue of the Greek Coins in the British Museum: Peloponnesus*, London
- Gauer, W. (1975), *Olympische Forschungen*, VIII, *Die Tongefässe aus den Brunnen unterm Stadion-Nordwall und im Südost-Gebiet*, Berlin
- Geiger, M. (1925a), "Lampea," *PW* 12, cols. 582–583
- (1925b), "Larisos," *PW* 12, col. 874
- Geyer, F. (1929), "Skollis," *PW* IIIA, i, col. 566
- Gray, D. (1974), *Seewesen (Archaeologia Homérica, Band I, G)*, Göttingen
- Grose, S. W. (1923–1929), *Fitzwilliam Museum. Catalogue of the McClean Collection of Greek Coins*, Cambridge
- Hägg, I., and J. M. Fossey (1980), *The Hellenistic Necropolis and Later Structures on the Middle Slopes, 1973–77 (Excavations in the Barbouna Area at Asine, I. and R. Hägg, edd. [Boreas 4, fasc. 4])*, Uppsala
- Hampe, R., and U. Jantzen (1937), "Die Grabung in Frühjahr 1937," *Olympiabericht I (Jahrb Beilage)*, pp. 25–97
- Hayes, J. W. (1972), *Late Roman Pottery*, London
- Hendy, M. F. (1969), *Coinage and Money in the Byzantine Empire, 1081–1261 (Dumbarton Oaks Studies 12)*, Washington
- Holmberg, E. J. (1944), *The Swedish Excavations at Asea in Arcadia*, Göteborg
- Holloway, R. R. (1971), "An Archaic Hoard from Crete and the Early Aeginetan Coinage," *American Numismatic Society Museum Notes* 17, pp. 1–22
- Howell, R. (1970), "A Survey of Eastern Arcadia in Prehistory," *BSA* 65, pp. 79–127
- Howland, R. H. (1958), *The Athenian Agora, IV, Greek Lamps and their Survivals*, Princeton
- Imhoof-Blumer, F., and P. Gardner (1964), *Ancient Coins Illustrating Lost Masterpieces of Greek Art, A Numismatic Commentary on Pausanias*, Chicago (reprint of articles in *JHS* 6–8, 1885–1887)
- Jacobsen, T. W. (1973), "Excavations in the Franchthi Cave, 1969–1971. Part II," *Hesperia* 42, pp. 253–283
- Johansen, K. F. (1923), *Les vases sicyoniennes*, Paris
- Jones, H. L. (1927), *The Geography of Strabo IV*, London
- Jones, J. E. (1975), "Town and Country Houses of Attica in Classical Times," in *Thorikos and the Laurion in Archaic and Classical Times (Miscellanea Graeca I, H. Mussche et al., edd.)*, Ghent, pp. 63–136
- Kahane, P. (1940), "Die Entwicklungsphasen der attisch-geometrischen Keramik," *AJA* 44, pp. 464–482
- Karwiese, S. (1968), "Österreichisches Archäologisches Institut" in «'Ἡλεία», *Δελτ* 23, B' 1 [1969], pp. 177–178
- Kirk, G. S. (1949), "Ships on Geometric Vases," *BSA* 44, pp. 93–153
- Kourkoutidou, E. (1969), «Βυζαντινὰ καὶ μεσαιωνικὰ μνημεῖα Θεσσαλίας», *Δελτ* 24, B' 2 [1970], pp. 227–235
- Kraay, C. M., and M. Hirmer (1966), *Greek Coins*, London
- Kunze, E. (1961), "Korinthische Helme," *Olympiabericht VII*, pp. 56–128
- Lane, E. A. (1933/1934), "Laconian Vase-Painting," *BSA* 34 [1936], pp. 99–189
- Le Puillon de Boblaye, E. (1836), *Expédition scientifique de Morée. Recherches géographiques sur les ruines de la Morée*, Commission Scientifique de Morée, Paris
- Leake, W. M. (1830), *Travels in the Morea*, London
- (1846), *Peloponnesiaca*, London
- Leroi-Gourhan, A., and N. and J. Chavaillon (1963), "Premiers résultats d'une prospection de divers sites préhistoriques en Élide Occidentale," *Annales géologiques des pays helléniques* 14, pp. 324–329
- Liagouras, A. (1964), «Ταφαὶ ἀνασκαφῆς Φιλίας-Καρδίτσας», *Δελτ* 19, B' 2 [1966], pp. 249–253

- Liddell, H. G., R. Scott, and H. S. Jones (1940), *A Greek-English Lexicon*, Oxford
- MacKay, T. S. (1967), "More Byzantine and Frankish Pottery from Corinth," *Hesperia* 36, pp. 249–320
- Mattingly, H. (1950), *Coins of the Roman Empire in the British Museum V (Pertinax to Elagabalus)*, London
- Mattingly, H. and Sydenham, E. A. (1923–1933), *The Roman Imperial Coinage I–V*, London
- McDonald, W. A., and G. R. Rapp, Jr., edd. (1972), *The Minnesota Messenia Expedition, Reconstructing a Bronze Age Regional Environment*, Minneapolis
- Meyer, E. (1909), *Theopomps Hellenika*, Halle
- (1937), "Oinoe," *PW* XVII, ii, cols. 2235–2244
- (1959), "Pylos," *PW* XXIII, ii, cols. 2114–2161
- Morgan, C. H. (1942), *Corinth*, XI, *The Byzantine Pottery*, Cambridge, Mass.
- Morrison, J. S., and R. T. Williams (1968), *Greek Oared Ships, 900–322 B.C.*, Cambridge
- Pallas, D. (1970), «Ἀνασκαφή τῆς βυζαντινῆς βασιλικῆς τοῦ Γλυκέο ἐν Ἡπείρῳ», *Πρακτικά*, pp. 82–89
- (1971), «Ἀνασκαφή τῆς βυζαντινῆς βασιλικῆς τοῦ Γλυκέο ἐν Ἡπείρῳ», *Πρακτικά*, pp. 130–145
- Papandreou, G. (1896), Ἡλειακά, Pyrgos
- Papathanasopoulos, G. (1969), «Ἀρχαία Ἡλεις», *Δελτ* 24, B' 1 [1970], pp. 152–154
- (1970), «Μακρύνσια», *Δελτ* 25, B' 1 [1972], pp. 191–193
- Parlama, L. (1971), «Θαλαμοειδὴς τάφος εἰς Ἀγραπιδοχώρι Ἡλείας», *Ἀρχ Ἐφ*, *Χρονικά*, pp. 52–60
- (1973), «Ἀρχαιότητες καὶ μνημεῖα Ἡλείας», *Δελτ* 28, B' 1 [1977], pp. 197–206
- Partsch, J. (1897), "Karte der Pisatis" (Mappe B1. I) and "Erläuterungen zu der Übersichtskarte der Pisatis," in E. Curtius and F. Adler, *Olympia I*, Berlin
- Pausanias, *Περιήγησις τῆς Ἑλλάδος*, Book I (J. H. Ch. Schubert, ed., Leipzig 1889)
- Payne, H. (1931), *Necrocorinthia*, Oxford
- (1940), *Perachora I*, Oxford
- Pentazos, E. (1969), «Ἀνασκαφή τάφων Μαξιμιανουπόλεως», *Δελτ* 24, B' 2 [1970], pp. 362–364
- Perlzweig, J. (1961), *The Athenian Agora*, VII, *Lamps of the Roman Period*, Princeton
- Petsas, P. (1969), «Ἀρχαιότητες καὶ μνημεῖα κεντρικῆς Μακεδονίας», *Δελτ* 24, B' 2 [1970], pp. 291–312
- Philippson, A. (1959), *Der Peloponnes*, Teil 2: *Der westen und süden der Halbinsel (Die griechischen Landschaften III)*, Frankfurt
- Postolaka, A. (1884), *Νομίσματα ἐν τῷ ἐθνικῷ μουσεῖῳ κατατεθέντα*, Athens
- Price, M., and N. Waggoner (1975), *Archaic Greek Coinage. The "Asyut" Hoard*, London
- Robertson, M. (1948), "The Finds" in W. A. Heurtley and M. Robertson, "Excavations in Ithaca, V: The Geometric and Later Finds from Aetos," *BSA* 43, pp. 1–124
- Robinson, D. M. (1930), *Excavations at Olynthos*, II, *Architecture and Sculpture: Houses and Other Buildings*, Baltimore/London
- Robinson, D. M., and J. W. Graham (1938), *Excavations at Olynthos*, VIII, *The Hellenic House*, Baltimore
- Robinson, H. S. (1959), *The Athenian Agora*, V, *Pottery of the Roman Period: Chronology*, Princeton
- (1968), "Salvage Archaeology in Elis, 1967," *AAA* I, pp. 46–48
- Roscher, W. H. (1886–1890), *Ausführliches Lexikon der griechischen und römischen Mythologie I*, Leipzig
- Runnels, C. N. (1982), "Flaked-Stone Artifacts in Greece during the Historical Period," *JFA* 9, pp. 363–373
- Rutter, J. B. (1982), "A Group of Distinctive Pattern-decorated Early Helladic III Pottery from Lerna and its Implications," *Hesperia* 51, pp. 459–488

- Rutter, J. B. (1983), "Fine Gray-burnished Pottery of the Early Helladic III Period: The Ancestry of Gray Minyan," *Hesperia* 52, pp. 327–355
- Schiering, W. (1964), "Archäologischer Befund," in A. Mallwitz and W. Schiering, *Olympische Forschungen*, V, *Die Werkstatt des Pheidias in Olympia*, Berlin
- Schlumberger, G. L. (1878), *Numismatique de l'Orient latin*, Paris
- Seltman, C. T. (1921), *The Temple Coins of Olympia*, Cambridge
- Servais, J. (1964), "Le site helladique de Khlémoutsi et l'Hyrminè homérique," *BCH* 88, pp. 21–27
- SNGCop*: see *Sylloge Nummorum Graecorum*
- Sordinas, A. (1970), *Stone Implements from Northwestern Corfu, Greece* (Memphis State University Anthropological Research Center, *Occasional Papers* 4)
- Sparkes, B. A., and L. Talcott (1970), *The Athenian Agora*, XII, *Black and Plain Pottery*, Princeton
- Sperling, J. (1942), "Explorations in Elis, 1939," *AJA* 46, pp. 77–89
- Spitzer, D. C. (1942), "Roman Relief Bowls from Corinth," *Hesperia* 11, pp. 162–192
- Strabo: see Jones, 1927
- Sylloge Nummorum Graecorum: The Royal Collection of Coins and Medals, Danish National Museum*, Aetolia-Euboea (1944); Phliasia-Laconia (1944); Argolis-Aegean Islands (1944), Copenhagen
- Syriopoulos, K. (1964), 'Η προϊστορία τῆς Πελοποννήσου, Athens
- (1968), 'Η προϊστορία τῆς Στερεᾶς Ἑλλάδος, Athens
- Themelis, P. G. (1965), «Δοκιμαστική ἀνασκαφή εἰς τὴν Ἡλειακὴν Πύλον», *Δελτ* 20, B' 2 [1967], pp. 214–219
- Torr, C. (1984), "Les navires sur les vases du Dipylon," *Revue archéologique* 24, pp. 14–27
- Valmin, M. N. (1938), *The Swedish Messenia Expedition*, Lund
- Vasmer, M. (1941), *Die Slaven in Griechenland*, Berlin
- Vollgraf, W. (1906), "Fouilles d'Argos, B. Les établissements préhistoriques de l'Aspis," *BCH* 30, pp. 5–45
- Wace, A. J. B., et al. (1953), "Mycenae 1939–1952," *BSA* 48, pp. 3–93
- Walter, H. (1958), "Die archäologische Befund," in "Die Gebiet südlich der Bäder am Kladeos," *Olympiabericht* VI, Berlin, pp. 41–73
- Walters, H. B. (1914), *Catalogue of the Greek and Roman Lamps in the British Museum*, London
- Weege, F. (1911), "Einzelfunde von Olympia, 1907–1909," *AthMitt* 36, pp. 163–192
- Williams, C. K. (1980), "Corinth Excavations, 1979," *Hesperia* 49, pp. 107–134
- (1981), "A Survey of Pottery from Corinth from 730 to 600 B.C.," *Annuario della Scuola Archeologica di Atene* 59, pp. 139–155
- Williams, C. K., and J. E. Fisher (1975), "Corinth, 1974: Forum Southwest," *Hesperia* 44, pp. 1–50
- Wroth, W. (1908), *Catalogue of the Imperial Byzantine Coins in the British Museum*, London
- Xenophon, Ἑλληνικά, O. Keller, ed., Leipzig 1901
- Yialouris, N. (1956), «Ἀνασκαφὴ Μπαμπῶν Μακρυσίων», *Πρακτικά*, pp. 187–192
- (1963), «Ἀρχαιότητες Ἡλείας-Ἀχαΐας», *Δελτ* 18, B' 1 [1965], pp. 101–104
- (1965), «Ἀρχαία Ὀλυμπία», *Δελτ* 20, B' 2 [1967], p. 209
- (1970), «Ἀνασκαφαὶ Ἀρχαίας Ἡλίδος», *Πρακτικά*, pp. 142–145
- (1973), «Ἀνασκαφὴ Ἀρχαίας Ἡλίδος», *Πρακτικά*, pp. 112–118
- (1977), «Ἀνασκαφαὶ Ἡλίδος», *Πρακτικά*, pp. 195–199
- Zapheiropoulos, N. S. (1952), «Ἀνασκαφικὰ ἔρευναι εἰς περιφέρειαν Φαρῶν Ἀχαΐας», *Πρακτικά*, pp. 396–412
- (1956), «Ἀνασκαφικὰ ἔρευναι εἰς περιφέρειαν Φαρῶν Ἀχαΐας», *Πρακτικά*, pp. 193–201

EXCAVATIONS AT
PYLOS IN ELIS

I

INTRODUCTION

Scholars have long identified Elean Pylos with the ancient remains situated on and about the hill now called Armatova near the modern village of Agrapidochori some 13 kilometers east of the ancient city of Elis (Map 1).¹ In the 1960's the site was threatened with partial inundation by the construction of a large earth-barrage dam on the Peneios River near the modern village of Kendron (Map 1). The storage lake created by the dam was eventually to reach 100 m. above mean sea level and was to result in the flooding of the Peneios valley and its environs for a distance of about nine kilometers upstream of the dam.² A trial excavation at Armatova by the Greek Archaeological Service in 1964 and further testing and site surveying in the Peneios valley by the various foreign Schools of Archaeology in 1967 showed that Armatova was the most important Classical site in the area and that it was likely to repay further excavation. As a result the work here described was undertaken. The site has more than fulfilled its promise, providing remains spanning a remarkably long time, from the Middle Bronze Age to the Late Byzantine or Frankish period.

HISTORY OF EXCAVATIONS AND STUDIES

The ruins near Agrapidochori were apparently first noticed in modern times by the French Expédition Scientifique de Morée (Le Puillon de Boblaye, 1836, p. 123), and they were mentioned in the 19th century by Leake (1846, p. 219), Curtius (1852, p. 39), Bursian (1868–1872, p. 306), Papandreou (1896, pp. 159 ff.), Partsch (1897, p. 4) and Frazer (1898, pp. 97–98). In the first half of the 19th century, scholars, notably Leake (*op. cit.*), showed a tendency to identify Pylos with Kulogli, a site on the Ladon River some eight kilometers upstream from its confluence with the Peneios (at Oinoe on Map 1; see discussion below under Appendix 1, IV and in Appendix 2, footnote 4). Since then, there has been almost universal agreement about the identification of Pylos with Armatova (see Meyer, 1959, no. 4 and Appendix 2 below).

The only important contribution to the study of the site in the 20th century, before the threat of inundation stimulated activity in the 1960's, was that of Sperling, who visited Armatova during surface survey work and published a brief but useful description (1942, p. 79).

In the 1960's Agrapidochori and Armatova became the focus of considerable activity. An Ionic capital and other Classical antiquities found near the church at Agrapidochori were reported by Yialouris (1963, p. 104). In 1964 Themelis, then Epimelitis of the 7th Ephoreia, spent a week carrying out trial excavation on the hill Armatova and in the surrounding fields (Themelis, 1965).³ In 1967 the various foreign Schools of Archaeology in

¹ For further discussion of the identification of the site see Appendix 2.

² The dam was completed in 1969, and the lake reached its final level only several years thereafter.

³ Many of Themelis' trenches were located in areas which were further investigated by our expedition, and

Greece conducted extensive site surveys in the area to be inundated by the dam (Robinson, 1968; $\Delta\epsilon\lambda\tau$ 23, 1968, B' 1 [1969], pp. 174–194; $\Delta\epsilon\lambda\tau$ 25, 1970, B' 1 [1972], pp. 193–194), and the Austrian Archaeological Institute dug two largely unproductive trial trenches at Armatova (Karwiese, 1968), one in the “northeast plateau” (X3 on Map 4, originally “B 1”), the other at the eastern end of the hill, just beneath the summit (X4 on Map 4, originally “B 2”).

Our excavations were sponsored by the American School of Classical Studies at Athens, which was represented by a field expedition from the University of Colorado.⁴ A major campaign lasting eight weeks was carried out in the summer of 1968,⁵ and a brief supplementary campaign lasting one week was carried out in 1970.⁶

At the conclusion of the excavations the finds were transported to the new Archaeological Museum at Olympia, where they are now housed. Study of the finds in the museum was carried out during the summers of 1970⁷ and 1971.⁸ Much of the preparation of the final publication was carried out during the academic year 1976/1977, when the principal author was on sabbatical leave from the Department of Classics of Cornell University.⁹

these are mentioned at the appropriate place in Parts A–G. Those in the “northeast plateau” are mentioned below (General Description). Two other trenches excavated by Themelis on the hilltop (T1 and T2 on Map 4) were evidently unproductive.

⁴ Grateful acknowledgment is made to the National Endowment for the Humanities for a grant covering the greater part of the expenses of the excavations (\$15,000), to the University of Colorado for a share in these expenses (\$6,000), and to the American School of Classical Studies at Athens for a further contribution towards the cost of labor (\$3,000). I would also like to thank the Research Council of the University of Colorado for a grant enabling me to travel to Greece in the spring of 1968 to survey the site.

⁵ Preliminary report: Coleman, 1969. It should be noted that the initial numbering of rooms in Areas C and D and of graves in Areas A and F 2 has been superseded by that used in the present final publication.

Full scale excavations were conducted from June 12 to August 3, during which some 28 workmen, two foremen, and a vase mender were employed. Work continued on a reduced scale with 12 workmen from August 5 to August 10 and with four workmen from August 12 to August 17. The principal author served as director of the excavations. The full-time excavation staff included Katherine Abramovitz (Coleman), Elizabeth G. Caskey, Gerald A. Bair, Andrew W. Barton, William A. Colby, C. W. J. Eliot and Jerome W. Sperling. Mrs. Sperling assisted for part of the season. Joseph C. P. Cotter, whose travel expenses were provided by the Pennsylvania State University, was also with the excavation for about five weeks. George Anastoulis of Miraka was general foreman, Aristomenes Arberoris of Ancient Corinth was second foreman, and George Arberoris of Ancient Corinth was vase mender. Most of the staff was housed in the village of Agrapidochori; a few were accommodated in tents near the site.

⁶ Thanks are due the American Philosophical Society (Penrose Fund) and the American Council of Learned Societies for grants which enabled the supplementary excavations to be carried out. For a brief preliminary notice see Coleman, 1971. The supplementary excavations were conducted from August 17 to August 22 under the direction of J. E. Coleman. A maximum of seven workmen was employed. These excavations served mainly to provide a check on information recorded in 1968 but also produced two new graves (Graves 1 and 24 in the present report) and evidence for two houses in the fields to the northeast of Armatova.

⁷ By J. E. Coleman and Katherine Abramovitz (Coleman). The study during this summer was also supported by the American Philosophical Society (Penrose Fund) and the American Council of Learned Societies.

⁸ With the support of a grant from the Humanities Research Grants Committee of Cornell University. The work was carried out by J. E. Coleman, Katherine Abramovitz (Coleman), and Marilyn A. Ross.

⁹ Preparation for publication was aided over the years by further grants from the Humanities Research Grants Committee and the Center for International Studies of Cornell University. A brief description of the site and our work there has been published in *Archaeology* (Coleman, 1983).

GENERAL DESCRIPTION

The site is located just upstream of the confluence of the Peneios River (which approaches from the northeast) with its tributary the Ladon,¹⁰ which approaches from the southeast (Map 2; Pls. 1–3). The united river flows almost due west in a broad shallow valley which falls imperceptibly and the sides of which gradually disappear until the river is traversing a flat alluvial plain. Upstream of the confluence, where the Peneios emerges beside the high mountain spur of Skollion,¹¹ its bed is constricted; above this point the Peneios and its other tributaries cascade in deep chasms from their headwaters high in the Erymanthos range. The Ladon, by contrast, winds in a more leisurely way from its headwaters on the southern flanks of Erymanthos; of the two river valleys, that of the Ladon is probably to be considered the more important in terms of ancient communications. The strategic importance of Pylos, which was probably considered the easternmost point of the district called Hollow Elis (κοίλη Ἠλιδος) in Classical times, will be discussed below.

The geological composition of the landscape around Armatova is similar to that throughout this part of Elis: alluvial deposits of clay, sand, waterworn pebbles, and small stones, through which the various watercourses wend their way (Philippon, 1959, pp. 323–331). There are no extensive outcrops of rock between the high limestone peak of Skollion on the east and Cape Kyllene on the west.

The center of ancient habitation was the low, flat-topped hill Armatova, which rises 25–30 m. above the surrounding fields (Maps 2–4, Pls. 1–3).¹² The hill is composed almost entirely of clay and is of natural formation; it was evidently created long ago in geological time by erosion of the alluvial deposit as the river beds shifted to and fro. The process of erosion has been continuing with destructive effects in modern times, especially on the northwestern side (Pl. 3:b), where, in our combined Areas B-E (Fig. 2), parts of ancient structures near the hill's edge have disappeared into the Peneios. Erosion will probably be accelerated now that the hill has become an island surrounded by the waters of the artificial lake (Pl. 3:d).

Armatova is relatively steep on all but the northeastern side, and its natural advantages for defense must have been apparent throughout antiquity (Xenophon [Appendix 1, II] calls it χωρίον καλόν in a context in which the issue is its defensibility), although it seems never to have been fortified. The top of the hill has a maximum length of about 350 meters, a maximum width of about 160 meters, and a total area of about 23,000 square meters. This broad expanse has become almost uniform in surface appearance from repeated plowing in modern times (see, e.g., Pl. 17:a); it was probably similarly level in antiquity, and the ancient deposit, whenever probed, proved to be extremely shallow, rarely attaining a depth of 1.0 m. (including 0.20 m. of disturbed topsoil). Many walls and structures have been

¹⁰ For the identification of this river see Appendix 2.

¹¹ For the identification of Skollion see Appendix 2.

¹² Armatova (ἡ Ἀρμάτοβα) is probably a Slavic derivative from a Greek version of the Latin *armātus*, -a. Cf. the place name Ἀρμάτοβο in the vicinity of Ioannina, described by Vasmer (1941, p. 21, no. 7) as: "Eine slavische Ableitung von einem griech. PN Ἀρμάτος, aus lat. Armātus." Neither of the variant forms recorded by earlier scholars (Ἀρμάτοβας, Papandreou, 1896; Armata, Sperling, 1942, p. 83) seemed to be in use in 1968. According to local folk-etymology, the hill was so-called because it was the place where participants in the Olympic games left their arms when on their way to Olympia.

destroyed by plowing and erosion, and the surface of the whole hill is covered with a thin scattering of ancient remains, mostly of pottery and tiles dating to the Classical period. In only one place could a significant change of contour be noted; there a low mound indicated the presence of the remains of a Byzantine or Frankish house (Map 4 at D13; see Part F).

To the northeast of the hill is a fairly flat space about 20 meters lower than the highest point but still raised to some extent above the other fields (roughly bounded by the 90 m. contour line on Maps 2 and 3). This “northeast plateau”, which was designated Area X during the excavation, provides a less steep route of access to the top of the hill than is found on the other sides, and it probably was the major approach in antiquity (Pl. 2:c). The results of our trial trenches in Area X (X1 on Map 3 and X2 on Map 4) were disappointing, however, as was that of the Austrian Archaeological Institute already mentioned (X3 on Map 4), inasmuch as no structures or undisturbed deposits came to light.

The most striking features of the “northeast plateau” are two moundlike prominences, evidently of natural formation, which were investigated by Themelis in 1964. One (“Tymbos I”), which is located beside a modern house (Maps 3, 4; Pl. 4:c), had been turned into a threshing floor by the owner; it contained five graves (Themelis, 1965, p. 216, no. 6). The other (“Tymbos II”), located at the northeastern end of the “northeast plateau” (Map 3, Pl. 4:a), contained four graves in two groups (*ibid.*, no. 7). All these graves are to be dated, at the earliest, to the Roman period, and they are probably considerably later (see Part G).

The low ground that lies between the two rivers to the east of the hilltop is bordered about 500 m. southeast of Armatova by a ridge on which the town of Agrapidochori is situated (Map 2). A small spur, now called “Kremilas”, projects from the southern side of this ridge, along the bank of the Ladon River. To the east and northeast the ground gradually rises until, at a distance of about a kilometer from Armatova, it encounters a series of gently rising hills. A stream, which descends from the east, passes by the northern side of the Agrapidochori ridge, follows a winding course through the low ground, and enters the Peneios not far to the northeast of the “northeast plateau” (Map 3). The low ground is very fertile and was extensively cultivated in modern times before the dam was built. In ancient times it was also the scene of considerable activity (see Archaeological and Historical Summary below).

For several kilometers upstream of their confluence, the beds of the Peneios and the Ladon are broad and flat, and the rivers have evidently changed their exact courses many times over the centuries. The evidence of erosion at the northwestern side of Armatova and in Area F 5 (Map 3, Pl. 9:d; see Part D) shows that the Peneios has encroached on the land that bordered it on the southeastern side since antiquity; the exact amount of encroachment cannot now be determined.

In order to facilitate our work, the top of the hill was subdivided into Areas with arbitrary boundaries, designated by the letters A–E and G (Maps 3, 4). It was necessary to excavate many trial trenches to test the ancient deposit and to determine where further excavation would be profitable,¹³ and each of these trenches was identified by a number which follows the Area designation. Many of the trial trenches proved disappointing,

¹³ The excavations of Themelis in 1964 had already indicated two promising areas, our Area C and the combined Areas B-E.

producing no traces of walls and only small quantities of ancient debris; these will not be described in detail. All trial trenches are shown on Maps 3 and 4, and the more productive ones are identified by letter and number on Map 4.

As a result of our probes, we went on to excavate more extensively in five places: at the eastern end of the hill within Area A (see especially Parts A and G below); within Area D, where we investigated the Byzantine or Frankish house already mentioned; and within Areas C, B, and E (the latter two of which were extended until they became contiguous). The latter Areas produced well-preserved remains of Classical houses (Part D) and Area B was also the location of a well of Geometric date (Part B).

The fields to the east and northeast of the hill Armatova were designated in general by the letter F, and specific Areas were further distinguished by numbers (Areas F 1—F 5). Since individual trenches were also identified by numbers, the word Trench or Area is used where necessary in this report to signify which series is meant (F 15 and F 16 on Map 3 are trenches, not Areas). Time did not permit us to follow up all promising leads, and some ancient remains, such as those visible in a roadway cutting to the north of Agrapidochori (Pl. 18:f), were left uninvestigated.

ARCHAEOLOGICAL AND HISTORICAL SUMMARY

The earliest remains yet identified at Armatova or its vicinity are those of a small and very badly preserved Middle Helladic settlement at the eastern end of the hill (Part A). The pottery recovered from this settlement suggests that it was similar to other communities of this period in the western Peloponnese and had no close connections with the more advanced centers to the east. There was no trace of widespread burning, nor did any other evidence come to light to suggest a reason for the abandonment of the settlement.

No indication of occupation was observed in the immediate area of Armatova between the Middle Helladic period and Late Geometric times. After the completion of our work, however, a chamber tomb of Late Helladic III B–C date was discovered some two kilometers to the southeast of Agrapidochori (footnote 1, p. 11 below) which bears witness to Mycenaean activity in the general vicinity. The location of the Mycenaean settlement has yet to be discovered. In any case, the presence of Mycenaeans near by shows that the general area had not for some reason become unattractive or impossible for human settlement. One should also note, in view of the very limited evidence for Geometric occupation, that evidence for occupation at Armatova itself between the Middle Helladic period and the Geometric period may have completely disappeared or simply have escaped our notice.

The hilltop Armatova was again the focus of human activity in the latest phase of the Geometric period (Part B). The evidence for this phase comes from a single well which had already partly disappeared through erosion; had it not been discovered, the presence of a Geometric settlement might have gone unnoticed. The Geometric pottery is similar to that of other parts of Elis and Achaia and suggests that the Pylians had few direct connections with eastern Greece. The most interesting piece is the local krater **B1**, on which a ship was painted. The Geometric occupation can be dated to the late 8th century B.C.

The 7th and 6th centuries B.C. are represented by a substantial deposit of pottery from a well in the fields to the northeast of Armatova (Part C). The evidence suggests that the

occupation was not widespread; apart from the well deposit itself, only occasional sherds were found (e.g., Part D, Area F 4, House), and these were confined to a fairly limited area in the vicinity of the well. There is no evidence for occupation at this time on the hilltop; as with the earlier periods, however, we must recognize that our evidence may be incomplete and be cautious of drawing general conclusions.

The pottery of the 7th and 6th centuries B.C. carries on the local tradition evident in the Geometric period. The date of the oldest material in the deposit cannot be exactly determined, although the earliest pieces are probably no later than the mid-7th century B.C. The latest pieces date to about 550 B.C. The pottery was probably all produced locally. Much of it is black glazed, but there are a few pieces of special interest with decoration in dark-on-light (e.g., **C26-C46**, **C54**) and light-on-dark (e.g. **C2**) techniques. Only one sherd in the whole deposit was in black-figured technique. The Archaic pottery has very close ties with that found at Olympia; taken together, the two sites allow us to recognize a local Elean school of Archaic pottery which developed in its own way from the preceding Geometric pottery with a minimum of influence from Corinth and Lakonia.

No evidence came to light to suggest that the hilltop was occupied between the Geometric period and the Classical period. In the second half of the 5th century, however, there was a sudden burst of activity. A village on Armatova hill was clearly the focus (Part D, Sections 1-3), but contemporaneous occupation appears also to have extended considerably beyond the hilltop itself, to judge by our tests in Areas F 4 and F 5 and the graves in Area K (Map 2, north of "Kremilas"; Part D, Sections 4-6) as well as by the earlier investigations of Themelis (1965, pp. 215-216, nos. 3, 4, and possibly no. 5; p. 218, no. 3). The traces of occupation in the Classical period are noticeably more widespread and numerous than those of any other period, and the village was evidently populous and flourishing.

There is practically no evidence for successive building phases in the Classical settlement on the hilltop, and it may be dated in general by archaeological parallels to the last quarter of the 5th century and the first third of the 4th century B.C. The same dating holds good also for most of the Classical remains beyond the hilltop; one house in the fields to the northeast (Part D, Section 4) produced some sherds which might be dated a little earlier (i.e. to the third quarter of the 5th century B.C.), but the evidence is equivocal. An Aeginetan coin of a somewhat earlier date from the hilltop (**D4**) was possibly an heirloom, but since it was found in an unstratified context, it could also have been a stray. Since, with the possible exception of a single coin (**D2**), nothing was found within the Classical settlement which is necessarily later than the first third of the 4th century B.C. and the pottery in general had not progressed to the stage represented at Olympia by deposits dating shortly before the mid-century (see, e.g., the one-handled bowls **D184-D188** and the skyphoi **D190-D198**), a date for the abandonment of the settlement in the 360's is reasonable on archaeological grounds. Such a date accords well with the historical evidence that the Pylians were defeated and harshly dealt with by the Eleans in 365/4 B.C. (Appendix 1, II and III; see discussion below).

The Classical village provides a detailed picture of provincial life in that era (cf. Coleman, 1983). The Pylians lived in a rural setting but still had easy access to the social and cultural amenities of the capital city of Elis (two or three hours away on foot or by wagon).

The evidence suggests that the economy was almost entirely agricultural. Weaving was an important activity, if, as is suggested below (p. 102), the spoollike weights found in such large numbers were loomweights. It is possible that the Pylians sold some of their produce and cloth in the city of Elis. Objects of metal were brought in from elsewhere (presumably from Elis), to judge by the lack of any trace of metalworking, and they tend to be simple and utilitarian (nails, lead weights, a few bronze vessels, etc.). Much of the finer pottery may also have been brought in, but all the pottery found was clearly made locally in Elis and came no great distance. The Pylians apparently used a variety of coinage; of the four identifiable coins which may be securely attributed to the Classical village, two are of Elis (**D1**, **D2**), one of Orchomenos in Boiotia (**D3**), and one of the Achaean League (**D5**).

Two pithos burials of Classical date were investigated, one in Area F 5, the other in Area K (Part D, Sections 5 and 6), both probably of children. The latter may have been part of a cemetery which included at least one tile-covered grave. Beyond this, no clearly identifiable graves of the Classical period were discovered, and our knowledge of the funerary customs of the Pylians of this period remains regrettably incomplete.

The increased importance of Pylos in the Classical period may be related in general to an increase in population throughout Elis in the second half of the 5th century B.C., to judge by the results of Sperling's survey (1942, especially pp. 87–88). An immediate cause may have been provided by the establishment near by of the city of Elis, which was created by synoecism in 471 B.C. to be a political and cultural center for the Eleans. Not only was the presence of the city of Elis likely to have been a great economic stimulus for the near-by villages but it also clearly enhanced the strategic importance of our site, inasmuch as Pylos guarded the major approach to the capital from the east and southeast.

Pausanias tells us that Pylos was on the mountain road from Elis to Olympia (Appendix 1, VIII; Map 1). This road passed along the Peneios River valley to Pylos, then turned southward up the valley of the Ladon River; near the modern town of Bechrou, where the Ladon bends eastward, it traversed the low ridge (rocky, but passable even for wagons) which separates the Ladon valley from the valley of the River Enipeus (the modern Lesténitsa, a tributary of the Alpheios); thence it passed southward and southeastward to Olympia (Partsch, 1897, *Mappe* B1. 1). The mountain road provided an alternative to the road by the plain, which passed closer to the sea, and it was not necessarily the less well traveled of the two. The distance from Elis to Olympia was roughly the same, whichever one chose.

Pylos, although apparently never fortified, was a natural strong point on the mountain road and would have been in a position to check or delay any invading force. It would also have been a good stopover point for peaceful traffic and may even have had a few opportunities for commerce, although trade was probably largely confined to the more important centers like Elis.

Of course, not all traffic which passed by Pylos was going or coming from Olympia. A major route of communication between the northwestern Peloponnese and Arkadia probably followed the mountain road from Elis as far as the bend of the Ladon near Bechrou and then continued on up the Ladon valley through the Elean highland (Akróreia) to Lasion and thence to Arkadia (Map 1). According to Diodorus' account of the Spartan-Elean war of about 400 B.C. (Appendix 1, I), this was the route taken by the Spartan King Pausanias,

and it was surely also used by those who traveled for peaceful purposes. Pylos may also have served as a control point for other routes which took advantage of the natural terrain. One such would have passed up the Peneios valley to the east of Pylos and given access to the towns in the western foothills of the Erymanthos range (Map 1); others may have passed into Achaia either skirting the hills to the north of Pylos or passing through them by way of the several tributaries which enter the Peneios from the north.

Given the strategic importance of Pylos, it is not surprising that it receives two brief mentions in the military annals of the 5th and 4th centuries B.C. On the first occasion, as described by Diodorus (Appendix 1, I), the town was captured by the Spartan King Pausanias during a campaign in Elis *ca.* 400 B.C. Pausanias entered Elis near Lasion and made his way through the highland (Akrorea), picking off towns and villages one by one. Pylos is mentioned as the final village captured before he proceeded to the city of Elis (which he failed to take). The topographical indications in the passage which have relevance for the identification of the site are discussed in Appendix 2. No trace of the capture of Pylos about 400 B.C. was discernible in the archaeological record; if Diodorus' information is accurate, the village must have recovered almost immediately.

The second historical reference is of greater importance, inasmuch as it may be closely correlated with the archaeological record. Xenophon relates (Appendix 1, II, III) that, during the war of 365/4 B.C. between the Eleans and the Arcadians, Pylos was seized by a party of more than 400 exiles from the city of Elis (aided by the Arcadians). The exiles were subsequently supported by the Pylians, and together they attempted an assault on Thalamai, a near-by Elean settlement (exact location unknown). The assault proved unsuccessful, and while those who had taken part were on their way back to Pylos, they were attacked and defeated by the Elean army. Many were killed in the fighting and the survivors harshly dealt with. The Elean army thereupon moved against Pylos itself and captured it. Although no archaeological evidence came to light for the actual capture of Pylos, its almost complete abandonment, which, as we saw above, can be dated archaeologically to the 360's B.C., was surely the result of these disastrous events. The hilltop itself was evidently left unoccupied until Late Byzantine or Frankish times, and its deserted state probably accounts for Pausanias' reference to the ruins (*τὰ ἐρείπια*) of Pylos (Appendix 1, VIII), despite the fact that the cemetery in the fields to the northeast of the hill was probably in use in his day (see below).

The site was probably never again so well populated as it had been before the disaster of 365/4 B.C. The later 4th century B.C. and the Hellenistic period are represented only by a few coins and sherds in the fields to the northeast of Armatova (e.g., **E1**, **E2**, **E43–E47**, **E57**). There is practically no evidence of human activity in the 1st century B.C. or the 1st century after Christ, and this is in keeping with Strabo's use of the imperfect tense when referring to Pylos (Appendix 1, IV). In the later Roman period, however, the site seems to have enjoyed a revival of sorts. The cemetery in Area F 2 (Part E, Section 2), which included at least 19 graves, can be dated to the 2nd and 3rd centuries after Christ, and the poorly preserved architectural remains in Area F 3 (Part E, Section 1) should probably be dated to the 3rd and 4th centuries. The remains of the Roman era show that the site continued to be markedly provincial, and imports such as glass vessels were of a very cheap and ordinary character.

After the 4th century, there is a long hiatus in the archaeological record (although once again we should be cautious in our interpretations, given the accidental nature of some of our discoveries). Small groups of burials found here and there may date to Late Roman or Byzantine times (Part H).

In the 12th or, more likely, the 13th century a simple house was built on the hilltop (Part G). Its construction may have been related to near-by Frankish occupation on the coast of Elis. Tile covered burials found beneath or near the house evidently predate it, although perhaps not by much.

In relatively modern times the center of activity in the area has shifted to Agrapidochori, which is located at the eastern end of a ridge about 500 m. southeast of Armatova (Map 2). A bridge over the stream which passes through the fields to the northeast of Armatova (Map 3, Pl. 18:d) probably dates to the 19th century; according to local informants, it supported a water conduit leading to a mill, the ruins of which can be seen near the bottom of the south slope of Armatova.

II

THE FINDS

PART A. MIDDLE HELLADIC

Trial trenches in Area A at the eastern end of the Armatova hill (Map 4, Fig. 1, Pl. 17) revealed clear indications of Middle Helladic occupation. The deposit here was very shallow and seldom extended to a depth of more than 0.30 m. beneath the modern surface. It had been much disturbed by recent plowing, and, in the easternmost trenches (Trenches A1 and A4, which were extended in the course of excavation until they became contiguous; see Fig. 1), by the intrusion of graves of relatively recent date (see Part G). The only identifiable feature of probable Middle Helladic date other than pottery was an ashy layer, perhaps a hearth, in Trench A3. A single row of stones in Trench A1 (Fig. 1; aligned ESE–WSW immediately to the west of Grave 28) may possibly be the foundations of a prehistoric wall; more likely, however, the stones were connected with the later graves, to judge by their alignment. In the northern part of Trench A1, immediately to the east of Grave 26 (Fig. 1), a deposit which included a Minyan kantharos (**A2**) and the bases of two large jars (e.g. **A41**) was found in an only partially disturbed state (Pl. 17:c).

Although no completely undisturbed Middle Helladic stratum was recognized, much, and in some of the trenches most, of the pottery found immediately above sterile earth in Trenches A1–A8 was of Middle Helladic date. The deposits in Trenches A9–A11, on the other hand, were predominantly Classical. This suggests that Middle Helladic occupation was limited to a relatively small area at the eastern edge of the hill, extending westward only about 65 meters.

A ground-stone axe (**A47**) and flaked-stone objects of flint, chert, and obsidian (**A48–A63**) were the only other Middle Helladic finds besides pottery. The flaked-stone objects were much more widely distributed than Middle Helladic sherds, and the possibility exists that some of them may date to an earlier or later period (see catalogue below).

Except for the possibility just mentioned, there is no evidence that Armatova was occupied or visited earlier than the Middle Helladic period; nor is there any evidence that the hill or its immediate environs were occupied between the Middle Helladic period and Geometric times.¹

¹ Themelis reported “prehistoric” sherds from his “Tymboi I and II” and Middle Helladic sherds from “Tymbos III” northeast of Armatova hill (1965, pp. 216–217, nos. 6–8; for locations of “Tymboi I and II” see Maps 3, 4). We found nothing to confirm his observations, however, and suspect that the sherds he found may have been from handmade pottery of a period later than the Bronze Age. The discovery of a Late Helladic IIIB–C chamber tomb two kilometers to the southeast of Agrapidochori (Parlama, 1971) bears witness to Mycenaean activity in the general vicinity.

CATALOGUE

All these objects were found in Trenches A1–A8, unless otherwise noted; for Areas and Trenches see Map 4. Exact contexts are given only for the most important objects.

POTTERY

All the prehistoric pottery found appears to be handmade, and all may be assigned to the Middle Helladic period. It is fairly typical of pottery from this period from other sites in the Western Peloponnese and has some close similarities with that found in a limited test excavation at near-by Chlemoutsi.² **A27–A29** belong to (or are closely related to) the type of pottery called “Adriatic” ware, which has been found in abundance in Messenia,³ Arkadia,⁴ and Elis.⁵ Recent study suggests that this ware was limited almost exclusively to the Middle Helladic period,⁶ although it does occur at Lerna in “later EH III.”⁷

Fine Ware

The fabric of the smaller vessels is fairly uniform. The clay is very fine and well washed. Mineral inclusions, where noticeable (often they are not), are small and predominantly white in color; some are gray. The fired clay is fairly soft and has a somewhat powdery or sometimes sandy surface. Firing is usually fairly even; sometimes cores are darker. Fabric and surface are predominantly light in color but with considerable variety; light buff, tan, light red, red orange, and gray. The gray pots are grouped separately, since the color was presumably deliberately produced, but it is clear that the color is merely a firing variation resulting from a reducing atmosphere. The gray color varies from very light (e.g. **A6**) to fairly dark (e.g. **A7**).

A few of the pots were apparently coated with a light-colored slip (e.g. **A9**). Others, such as the gray pieces, have a polished surface. Decoration is very restricted. A few sherds had decoration in matt paint (**A1** is the only example included in the catalogue). A gray sherd has a simple pattern of finely incised lines (**A7**). Another sherd has an incised line on the bottom (**A17**; potter’s mark?).

MATT PAINTED

A1. Pl. 19:b. Fragment of body. Narrow matt red-purple bands on buff-yellow surface.

GRAY (MINYAN)

A2 (AP.54). Ill. 1, Pl. 20. Kantharos. Found in Trench A1 near bases of two large vessels (e.g. **A41**).

² Servais, 1964, pp. 21–27. Our fine and semicoarse wares would probably all belong to what he calls “*une sorte d’imitation locale des formes minyennes*” (pp. 22–23), which occurs in similar colors and shapes: cf. **A1–A29** with his figure 6. Chlemoutsi produced some 20 sherds of what Servais (p. 21) regards as a true Gray Minyan, which is unparalleled at Armatova.

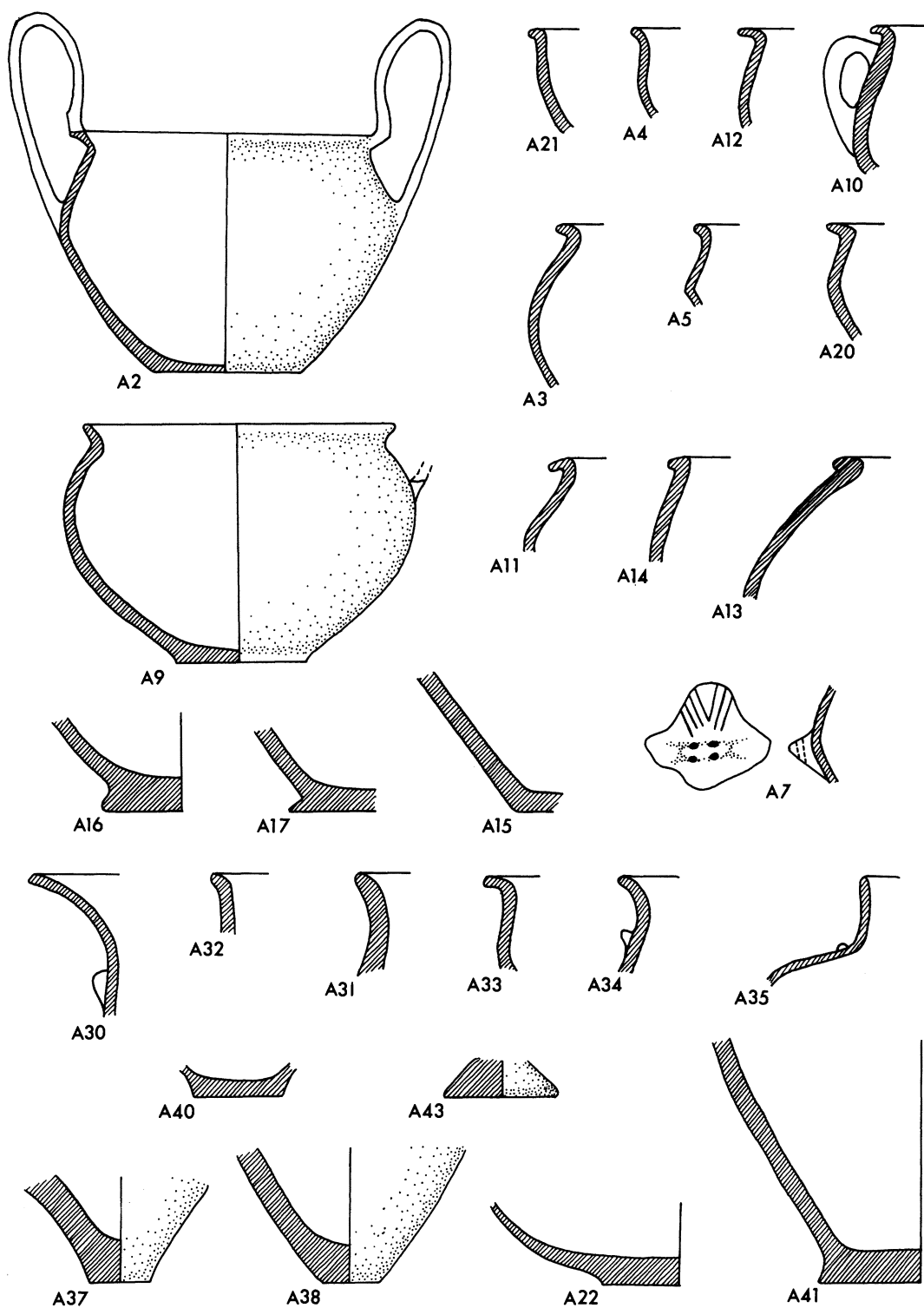
³ E.g. Valmin, 1938, pp. 256–269, 287–290.

⁴ Holmberg, 1944, pp. 106–110; cf. Howell, 1970, pp. 111–113.

⁵ Chlemoutsi: Servais, 1964, p. 25. Olympia: Weege, 1911, p. 174, fig. 6.

⁶ McDonald and Rapp, 1972, p. 135.

⁷ Rutter, 1982, p. 460, note 5.



ILL. 1. Middle Helladic pottery. Scale A2–A21 2:5; A22–A41 1:5

Coleman, 1969, pl. 159:a. About one-half preserved; restored. H. 0.087, D. rim 0.13, D. bottom 0.05. Fine, soft, gray fabric. Angular body; everted rim; flat, uneven bottom; high-swung ribbon handles.

Cf. Zappeiropoulos, 1952, fig. 5, from Pharai. Two goblets with high-swung handles from Chle-moutsi (Servais, 1964, fig. 9, no. 14 and fig. 12) differ in that the rim is not offset. EH III kantharoi from Olympia (e.g., Weege, 1911, p. 168, figs. 5-7) are generally similar but have taller lips; for their dating see Rutter, 1983, pp. 339-340.

Rims

A3. Ill. 1, Pl. 19:a. D. est. 0.14. Everted.

A4. Ill. 1, D. est. 0.14. Everted.

A5. Ill. 1. Everted; angular body.

Base

A6. Pl. 19:a. Raised base. D. 0.03.

Other fragments

A7. Ill. 1, Pl. 19:a. Lug with two vertically pierced holes. Finely incised lines in a multiple chevron above lug.

A8. Pl. 19:a. Fragment of small strap handle.

OTHER COLORS, UNDECORATED

A9 (AP.18). Ill. 1, Pl. 20. Bowl. Found in Trench

A1. About one-half preserved; partly restored. H. 0.094, D. rim est. 0.105, D. base 0.048. Soft, light-colored fabric; brown slip on inside and outside, worn in places. Everted rim; round body; flat bottom. The stump of one handle is preserved on the shoulder; presumably there were originally two.

Rims

A10. Ill. 1, Pl. 19:a. D. est. 0.18. Everted; vertical handle.

A11. Ill. 1. D. est. 0.10. Everted.

A12. Ill. 1. D. est. 0.14. Everted.

A13. Ill. 1, Pl. 19:a. D. est. 0.16. Rolled toward outside.

A14. Ill. 1. D. est. 0.18. Similar to preceding but more upright.

Bases

A15. Ill. 1, Pl. 19:a. Flat bottom.

A16. Ill. 1, Pl. 19:a. Raised base. D. est. 0.06.

A17. Ill. 1, Pl. 19:a. Raised base; straight incised line on the bottom (part of a cross?).

Other fragments

A18. Pl. 19:a. Handle like **A10**.

A19. Pl. 19:b. Knob on outside, flattened on the top.

Semicoarse Ware

The fabric of some of the smaller vessels and the finer among the larger vessels is essentially the same as that of the fine ware but is somewhat coarser. There are more and larger mineral inclusions of the same types, some reaching a length of 0.002 m. or more. A few sherds have pieces of what appears to be previously fired clay (ground-up potsherds?) as grog. None of the pots in this category was deliberately fired gray. There are a few pieces with simple decoration: one sherd (**A20**) is coated with a dark paint; a few sherds have finely incised, herringbone patterns (e.g. **A27-A29**), and a few sherds have plastic ridges with impressed edges (e.g. **A25, A26**).

Rims

A20. Ill. 1, Pl. 19:b. D. est. 0.12. Kantharos(?). Coated inside and outside with a black, slightly shiny paint.

A21. Ill. 1. D. est. 0.08.

Base

A22. Ill. 1, Pl. 20. Raised base of spreading bowl. D. est. 0.06.

Handles

A23. Pl. 19:b. Horizontal; round in section.

A24. Pl. 19:a. Horizontal lug, vertically pierced.

A27–A29. Pl. 19:b. Decorated with incised herringbone pattern.

Body fragments

A25, A26. Pl. 19:b. Decorated with plastic ridges having perpendicular impressions at the edge.

Coarse Ware

This category comprises some of the very large storage jars which are very coarse and soft and have an oatmeallike consistency. The tempering consists predominantly of pieces of what appears to be previously fired clay rather than rocky minerals.

Rims

A30. Ill. 1. D. est. 0.38. Flaring, with horizontally elongated ridges or lug on shoulder.

A31. Ill. 1. D. est. 0.18. Everted.

A32. Ill. 1, Pl. 19:b. D. est. 0.16. Everted.

A33. Ill. 1, Pl. 19:b. D. est. 0.20. Everted.

A34. Ill. 1, Pl. 19:c. D. est. 0.16. Everted, with lug-like projection on shoulder.

A35. Ill. 1, Pl. 19:c. D. est. 0.18. Jar with upright neck and luglike projection on shoulder.

A38. Ill. 1, Pl. 19:d. D. est. 0.045. Similar to preceding but somewhat less thick walled.

A39. Pl. 19:d. D. est. 0.06. Slightly raised base.

A40. Ill. 1, Pl. 19:d. D. 0.07. Slightly raised base of vessel with uneven walls.

A41. Ill. 1. Slightly raised and flaring base.

A42. Pl. 19:d. Flat bottom with slightly convex inner surface.

A43. Ill. 1, Pl. 19:d. D. est. 0.09. Conical fragment, perhaps a base (or knob from lid?).

Bases

A36. Pl. 20. D. 0.13. Flaring raised base of thick-walled vessel.

A37. Ill. 1, Pl. 19:d. D. 0.04. Narrow, nearly conical bottom of thick-walled vessel.

Handles

A44. Pl. 19:c. Horizontal; round in section.

A45. Pl. 19:c. Vertical; straplike.

A46. Pl. 19:c. Vertical; oval in section. From jug or jar.

GROUND STONE

A47 (AO.31). Pl. 20. Fragment of bored axehead of sandstone. Found in Trench A3. Pointed end and about one-half of shaft hole preserved. L. pres. 0.062, W. pres. 0.068, H. 0.051. D. of hole varies from 0.27 to 0.033. Many similar examples have

been found in Middle Helladic contexts: see Syriopoulos, 1964, p. 399 and 1968, p. 351 under *πολεμικὰ πέλεκες*. Sandstone was used for some of the prehistoric bored tools found at Malthi: Valmin, 1938, p. 344.

FLAKED STONE

During the excavations many artifacts of chert or flint and obsidian were noted, and 110 of these were recorded in some detail. Sixty-five of the 110 were found in Area A. Of the rest,

25 were found elsewhere on the top of the hill (e.g. **A48–A50, A52, A57, A63**), 9 come from Area X in the northeast plateau, and 11 come from Areas F 2—F 4 in the fields to the northeast of the hill.

The pieces of flaked stone from Area A occurred in close proximity to the Middle Helladic settlement, and many were found in association with Middle Helladic sherds. It is therefore reasonable to assign their period of manufacture and use to the Middle Helladic period. The pieces found elsewhere than in or near the Middle Helladic deposits, on the other hand, raise a question, since it has recently been observed that flaked-stone tools of early date may sometimes have been re-used in Classical and later contexts (Runnels, 1982). Some further details about findspots are therefore worth considering.

Only two pieces were found in well-stratified contexts of later date than the Middle Helladic: **A57** came from floor level in Room 1 of Areas B-E, and another piece (B-204) came from below the tops of the walls in Room 25 of Areas B-E. Nine pieces found at various levels in the Archaic well in Area F 2 (Part C) might be said to have been stratified in the sense that the well is a closed deposit. Nevertheless, it does not represent a context in which flaked-stone tools might have been used, and, since it was probably deliberately filled with material from the immediate vicinity, there is a significant possibility that earlier artifacts were included in this material. Ten of the pieces found in Areas B-E (including **A48** and **A49**) may come from a context earlier than the Classical settlement. They were collected in an isolated trench (B4; Map 4) immediately above “stereo” (a geological formation undisturbed by human activity) and below the level at which Classical activity was clearly attested. All pieces other than those from Area A and those just mentioned were found in disturbed surface levels or in trial trenches lacking closely datable strata.

The evidence of the findspots tends to suggest, in my opinion, that the period of use of all the flaked stone found at Armatova was restricted to the Middle Helladic period. Pieces found in disturbed or later contexts could be strays or “kick-ups” from a Middle Helladic presence at the site. A possible objection to this view is that Middle Helladic sherds were apparently not so widely distributed as pieces of flaked stone. Surface surveys show, however, that prehistoric flaked stone is often more widely distributed than contemporaneous pottery, a circumstance one would expect, given the use of flaked stone for sickles and other tools used for agricultural purposes. The fact that the pieces from Armatova generally resemble those found in Classical contexts at Halieis published by Runnels (1982, pp. 366–369) is of no significance to the argument, since the pieces from Halieis are thought to have been re-used from earlier periods (*ibid.*). The finds from Armatova therefore give no support to Runnels’ general thesis concerning the re-use of earlier flaked-stone artifacts in the Iron Age and later.

Another possibility cannot be entirely excluded: some of the flaked-stone pieces may date to a phase of occupation earlier than the Middle Helladic. Notched pieces (“denticulates”) like **A56**, for instance, occur in Mesolithic levels at the Franchthi Cave (e.g. Jacobsen, 1973, fig. 9:1), although they are also found in “Bronze age” levels at Sidari in Kerkira (e.g. Sordinas, 1970, fig. 6:12). Palaeolithic tools have been found at several near-by sites in Elis (Leroi-Gourhan *et al.*, 1963; Chavaillon *et al.*, 1967; *idem*, 1969).

Seven of the 110 pieces are obsidian (e.g. **A48**, **A49**), which appears to be of characteristic Melian type. The rest are flint or chert, which was presumably available locally. Most of the pieces of obsidian derive from small, narrow blades with triangular section, of fairly careful manufacture. The flint and chert pieces include some narrow blades (e.g. **A50–A52**) but mostly derive from larger blades and flakes. The catalogue includes 16 of the most significant pieces.

SMALL OBSIDIAN BLADES (parallel sides, triangular in section)

A48 (AO.15). Pl. 20. Areas B-E, Unstratified (Trench B4). L. 0.015, Th. 0.003.

A49 (AO.16). Pl. 20. Areas B-E, Unstratified (Trench B4). L. 0.015, Th. 0.003.

SMALL FLINT OR CHERT BLADES (triangular in section)

A50 (AO.252). Pl. 20. Area D, Trench D13, Unstratified (see below, p. 144). L. 0.021, Th. 0.004. Gray white. Retouching on both edges.

A51 (AO.5). Pl. 20. L. 0.018, Th. 0.003. Light gray with darker gray stripe at one end.

A52 (AO.282). Pl. 20. Area C, Unstratified (at surface above or near Room 4). L. 0.02, Th. 0.005. Dark brown. One edge blunt (broken?); the other serrated and polished from use.

LARGER FLINT OR CHERT BLADES

A53 (AO.4). Pl. 20. L. 0.058, Th. 0.004. Tan with whitish surface. Retouching at edges and one end.

A54 (AO.3). Pl. 20. L. 0.042, Th. 0.011. Dark brown.

A55 (AO.2). Pl. 20. L. 0.056, Th. 0.009. Dark brown with tan flecks.

A56 (AO.42). Pl. 20. L. 0.025, Th. 0.005. Gray. One edge serrated ("denticulate"). For parallels see above.

A57 (AO.392). Pl. 20. Areas B-E, Room 1. L. 0.037, Th. 0.006. White.

OTHER PIECES OF FLINT OR CHERT

A58 (AO.29). Pl. 20. L. 0.037, Th. 0.006. Gray brown.

A59 (AO.7). Pl. 20. L. 0.024, Th. 0.006. Gray yellow.

A60 (AO.28). Pl. 20. L. 0.029, Th. 0.009. Light brown.

A61 (AO.47). Pl. 20. L. 0.027, Th. 0.007. Dark red.

A62 (AO.8). Pl. 20. L. 0.016, Th. 0.003. Yellow brown.

A63 (AO.22). Pl. 20. Areas B-E, Unstratified (Trench B6). L. 0.03, Th. 0.007. Gray white.

PART B. GEOMETRIC

The well containing the deposit of Geometric date was situated within Area B (later part of our combined excavation Areas B-E) at the northwestern edge of the hill Armatova, where there is a nearly vertical scarp created by erosion (Map 4, Fig. 12, Pls. 3:b, 4:b). The well was clearly visible in the scarp before excavation (Pl. 4); about one-half of its circumference and contents had already tumbled down the hillside and been lost before any excavation took place.¹

The well was unlined and as preserved was only about five meters deep (Fig. 5:a, Pl. 4:d-f). For the upper 3.5 m. it penetrated a layer of small stones and gravel; below this it was cut into a layer of clay. The upper part was *ca.* 1.8 m. wide; at the top of the clay layer the well narrowed somewhat, and small channels had been cut into the top of the ledge thus created, presumably to lead water into the well. The lower part was rounded; it evidently served as a collecting basin for ground water which had penetrated the upper stony layer and gathered above the relatively impervious clay layer.

The original level of the top of the well could not be determined. No evidence of contemporaneous occupation was found in its vicinity (or anywhere else at Armatova). Wherever tested, the remains of the Classical town in Areas B-E were found to rest on virgin soil. We must therefore suppose that any domestic remains connected with the well were carried away by erosion or obliterated when the Classical town was built.

The deposit in the well was fairly homogeneous: grayish sandy earth with occasional small stones, occasional animal bones (some with marks of butchering), and many sherds. No stratum was recognized at the bottom which could be dated to the time of the use of the well.

Specific parallels for the finds are cited in the catalogue; the general significance and chronology of the deposit are discussed in the Commentary which follows it.

CATALOGUE

POTTERY

In 1968 six tinfuls² of pottery were collected, and this was roughly equal to the amount found earlier by Themelis. All the pottery appears to have been locally made. The fabric of the fine ware resembles that of the coarse, and there is also a general resemblance between the Geometric pottery and that of the Archaic and other periods found at Elean Pylos.

¹ The well was partly excavated in 1964 by Themelis (1965, p. 217). We would like to thank him for his generosity in making his finds available for us to study. Some of the pieces he published are here republished (see catalogue for references). The identifying numbers he had assigned to these and some of the other pieces he excavated (numbers preceded by the Greek letter pi) are given below in parentheses immediately after the present catalogue number.

² The tins used for these estimates are oil tins containing five imperial gallons.

Fine Ware

This comprises roughly one third of the pottery from the well. The fabric, which is generally similar to that of the fine Middle Helladic pottery already described (Part A), is quite fine but with a rather sandy feel. The clay is generally light in color with a red-brown or occasionally gray or buff tone. The glaze-paint tends to be thin, with many minute cracks; it is generally black but has turned brown or red in places through misfiring. All the pottery included under fine ware is wheelmade, but it should be noted that one of the handmade pieces classified as coarse (**B54**) approaches the fine ware in fabric.

KRATERS

The kraters are very fragmentary and no complete profile is preserved. All pieces significant for their size, shape, or decoration are included in the catalogue.

The fragments are probably all from one type, relatively closed and deep, with horizontally placed handles rising obliquely from the shoulder. At least some had a high foot or pedestal (e.g. **B9**, **B10**). The rim turns upward or slightly outward and has a splaying lip. In general, the rim makes a continuous curve with the shoulder, and there is sometimes a low, horizontal ridge near the junction (e.g. **B1**, **B8**). The foot meets the lower body at an angle. Only one foot with complete profile preserved may be assigned with confidence to a krater (**B9**); it is high and flaring with a low, horizontal ridge just below the juncture with the body and a flattened lower surface. One fragment must have been from a pedestal (**B10**). The handles are round in section and were probably set opposite one another; only one is included in the catalogue (**B11**; cf. also **B16**).

The decoration is simple. Fairly broad areas were solidly glazed (e.g. **B5**, **B20**) or decorated merely with horizontal bands (e.g. **B17**–**B19**), occasionally interspersed with zones of running spirals, sigmas, or vertical lines with a jog in the middle (e.g. **B12**, **B14**). More

elaborate decoration was largely confined to a zone on the upper shoulder (e.g., the ship on **B1**, the “sausages” on **B2** and **B3**, and the step meander on **B4**). All the kraters were solidly glazed on the inside, as well as on the top of the lip.

Pedestaled kraters with horizontally placed handles are found in Western Greece as early as the Protogeometric period (e.g. Coldstream, 1968, pl. 48:f, from Derveni in Achaia). Ithaka has produced many local kraters with and without pedestals (Robertson, 1948, pp. 69–71; Benton, 1953, pp. 294–297). Although they may be dated in general to the 8th and 7th centuries B.C., a more precise chronology for specific pieces is not always possible. The Ithacan kraters closest to ours in the shape of body and lip (e.g. R 364 = B 800,³ which Benton [1953, p. 297] identifies as “probably Corinthian”; R 365–R 367, R 376) were (except for R 376) considered Geometric by Robertson (*ibid.*, p. 70) whereas Benton regards them as Orientalizing (*ibid.*, pp. 266, 297). Since they are close in profile and decoration to a kantharos dated by both authorities to the Geometric period (R 331 = B 715), I would argue for the earlier rather than the later dating. A krater of the Late Geometric period from Pharai (Zapheiropoulos, 1956, pl. 93:β) is of a different type from ours and represents a late development of the West Greek Protogeometric tradition.

³ Here and elsewhere in the catalogue I follow the usage of Coldstream in referring to the pottery from Ithaka: pieces published by Robertson (1948) are cited by his catalogue number preceded by the letter R; those published by Benton (1953) are cited by her catalogue number preceded by the letter B.

For the profile and general proportions of our kraters, cf. a krater of the mid-7th century B.C. from Olympia (Kunze, 1961, figs. 70, 71), which, however, differs in having a tall, offset rim.

Fragments with rims preserved

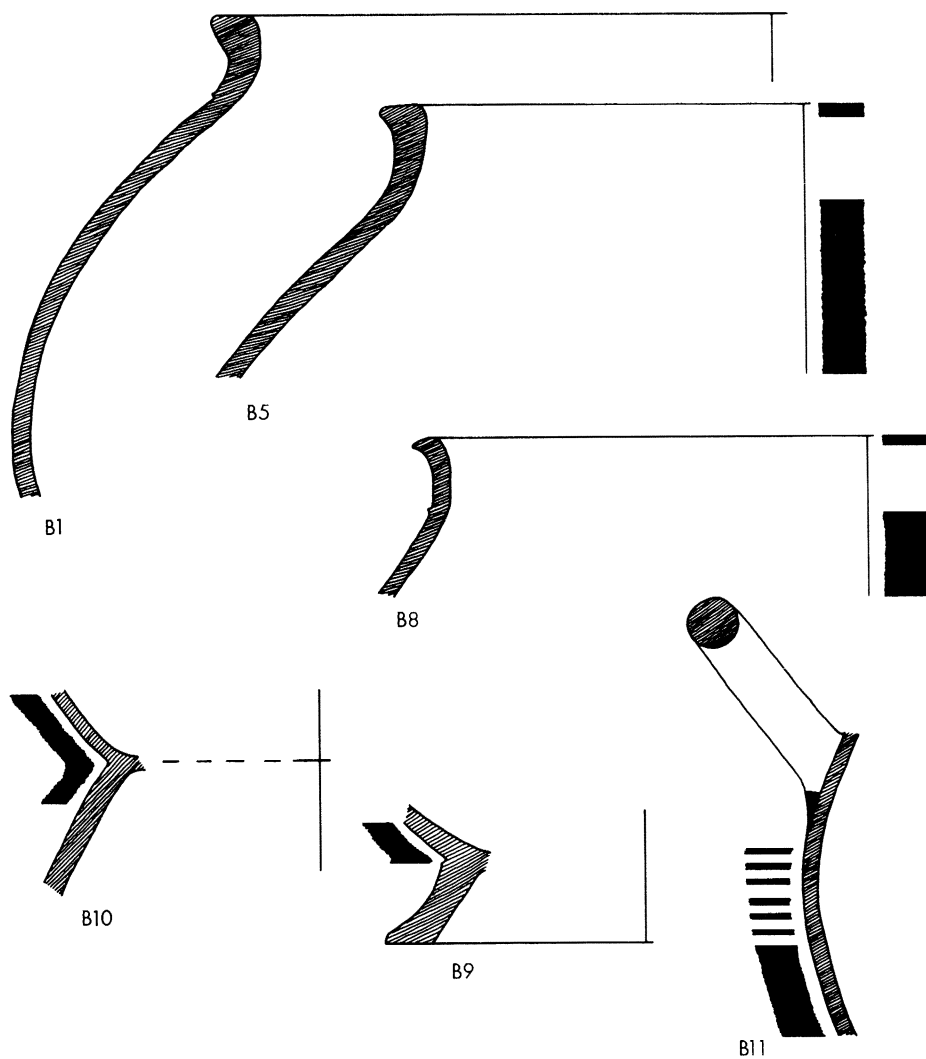
B1 (Π 845). Ill. 2, Pl. 21. Themelis, 1965, pl. 251:γ, upper; plan 4 (this drawing has been reproduced in *Archaeological Reports*, 1965–1966, fig. 16, above; *A History of Seafaring*, G. F. Bass, ed., London 1972, pl. 42, fig. 3; Gray, 1974, Abb. 19; and J. N. Coldstream, *Geometric Greece*, New York 1977, p. 179). H. pres. 0.16, D. est. 0.37, Th. 0.004–0.008. Everted lip, flat on the top; slight ridge on upper shoulder; part of handle attachment at right edge.

Reserved zone beneath lip (incorrect as shown in previously published drawing). Partly preserved ship in zone on shoulder: low, curving hull, painted in silhouette; a single horizontal line above the hull with short, evenly spaced lines extending upward from it; high, curving stern to right, partly lost, with triangular steering oar projecting at a diagonal; four horizontal lines and one vertical line representing a railed platform at the inside of the stern; slightly raking mast with rectangular bracket near base, projecting beyond the horizontal line above the hull; sail, consisting of two rows of checkerboard rectangles, extending to right from the top of the mast; the sail also extended to left, where part of a dark rectangle is preserved (the lower rectangle next to the mast was reserved); two lines extending from the right corner of the sail, one to the bracket at the base of the mast, the other to the platform at the stern; another line extending from the bracket toward the left corner of the sail. An oblong painted area ("sausage") to the right of the ship. Since the ship occupies only a small part of the circumference, something else may have been depicted to the left, or the vase may have had more than two handles. A narrow band above and a broader one below the figured zone; beneath this five narrow, fairly closely spaced bands and a broader band or area. A vertical line of paint extending down from near the left end of the "sausage" crosses several bands (accidental drip?).

The ship has a general similarity to other

Geometric representations of warships. There are parallels for the low hull, the high, curved stern with its platform, and the short, projecting lines above the deck or railing, which presumably represent thole pins; cf. especially Kirk, 1949, group 1, pp. 95–97. Our ship, however, has several peculiar details. The deck or railing is not supported by vertical struts. These are absent in other representations only when the space above the hull is filled with rowers, corpses, or the like; e.g. Morrison and Williams, 1968, pls. 3:c, d; 4:a. The bracket at the base of the mast is without parallel. Perhaps it represents a fixture for the attachment of halyards, lifts, and other lines; a mast step is less likely, since it is so broad. Although other representations often have sails divided into rectangles (e.g. Morrison and Williams, 1968, pl. 2:c, d), I know of no others in which alternate rectangles are solidly glazed in a checkerboard pattern.

There is no exact parallel for the second pair of sheets (if that is what they are) with lower ends attached to the bracket near the base of the mast. The usual arrangement in Attic representations is a single pair of sheets, one attached aft and one forward (e.g. Morrison and Williams, 1968, *loc. cit.*; in Torr, 1894, figs. 3 and 4 the sheets are shown crossing over one another. The lines extending down from roughly the center of the lower edge of the sail in Morrison and Williams, 1968, pl. 2:d are probably not sheets; the authors suggest [p. 22] that they are brailing ropes). A distant parallel to our arrangement may possibly be seen on a hydriksos from Attica (Kahane, 1940, pl. 22:1; Kirk, 1949, p. 96, no. 2) which is shown rigged but without a sail; lines, presumably braces, extend fore and aft from the yard ends; a second pair of lines extend from the yard ends to a place near the foot of the mast. Kirk (1949, p. 96) suggests that the second pair of lines might be "additional braces"; in any case, they are very unusual, and there is no need to think of them as sheets. Possibly the Elean artist intended to show both sheets and braces but did not know enough or care enough to show them accurately. Braces are sometimes shown in Attic representations (e.g. Morrison and Williams, 1968, Geom. 7 and 8 on pp. 21–22), but, like the sheets, they always terminate forward and aft.



ILL. 2. Geometric pottery: fine-ware kraters. Scale 2:5

The "sausage" also occurs on **B2** and **B3**. Such "motifs" are a West Greek peculiarity, and they occur first in the Lower Deposit at Ithaka (e.g. R 319, R 320 = B 708): see Coldstream, 1968, p. 227; Robertson, 1948, p. 104. They are usually found on kantharoi, either between the handles (e.g. R 319, B 728) or with the handles at the mid-point (e.g. R 320 = B 708, B 760); the latter was evidently the scheme employed on our kraters. B 760, which Coldstream dates to LG I, is an important parallel to ours inasmuch as another motif, in that case misunderstood meander-hooks, is also employed between the "sausages". A later example of such a composition is an Orientalizing kantharos from Olympia (Curtius and Adler, 1890, pl. 69, no. 1296; Gauer, 1975, pl. 32:3), which has a dog between the "sausages". A recently published krater from the city of Elis (Yialouris, 1973, pl. 134:a), which is close to ours in shape, has pairs of "sausages" on the shoulder. The presence of the "sausage" reinforces the conclusion (from fabric and shape) that **B1** was of Elean manufacture.

The Elean warship has some fairly close parallels on Attic vases dated to MG II and LG I; e.g. Kirk, 1949, group 1, nos. 1 and 2 (dated by Coldstream, 1968, p. 22 to "transitional MG II—LG I") and no. 3 (dated by Coldstream, 1968, pp. 26–28, to MG II). Like our representation, these tend to be more simple than those on vases of the "Dipylon style". On the other hand, there are also parallels with vases of the latest stages of the Geometric period (e.g. a Corinthian oinochoe from Thebes of the Thapsos class, Berlin 3143.45; Johansen, 1923, pl. I:3; Gray, 1974, Abb. 18:d; Coldstream, 1968, p. 103); these would suggest that our krater, in keeping with the rest of the pottery from the well, may best be regarded as dating to the very end of the Geometric period.

B2 (II 846). Pl. 21. Themelis, 1965, pl. 251:γ, lower left. Profile similar to **B5** (Ill. 2). Reserved zone beneath lip. "Sausage" on shoulder. Zone to left bordered at top and bottom by four horizontal bands: nine curving, roughly vertical lines parallel to edge of oblong area; next to them were horizontal bands (cf. **B3**), of which part of the uppermost only survives. At least five regularly spaced horizontal bands below zone and oblong area.

For the "sausage" cf. **B1**. The combination of nearly vertical and horizontal lines in the handle zone is somewhat reminiscent of the Thapsos class of Corinthian Late Geometric (Coldstream, 1968, pp. 102–104) and its Ithacan imitations; such a scheme is not found elsewhere, however, in juxtaposition to "sausages".

B3. Pl. 21. Two fragments, now lost; probably both from one vessel. Profile similar to **B5**. Decorative scheme like that of **B2**. Fragment A: reserved zone beneath lip; "sausage" at right; zone to left bordered at top by 5 horizontal lines; 11 roughly vertical lines, curving toward right, gradually straightening toward left; next to these is an area with discontinuous horizontal lines. Fragment B (not illustrated): like Fragment A but with "sausage" to the left. For the juxtaposition of "sausages" and linear decoration see **B2**; the discontinuous horizontal lines are without close parallel.

B4 (II 873). Pl. 21. Profile similar to **B5** (Ill. 2). D. rim est. 0.35. Outer edge of lip glazed. Reserved zone beneath lip. Zone of step meander on upper shoulder, bordered above by three and below by two narrow horizontal lines; another horizontal line or band at lower edge of fragment. The step meander is unusual in that it consists of many lines rather than the two which are standard in other Geometric styles (often filled with hatching).

B5. Ill. 2. D. est. 0.28. Reserved zone beneath lip; otherwise solidly glazed.

B6, B7. Pl. 21. Similar to **B5**.

B8. Ill. 2, Pl. 21. D. est. 0.30. Slight ridge between rim and shoulder. Decorated as the preceding.

Bases

B9. Ill. 2, Pl. 21. High, flaring foot, D. est. 0.17, flattened on the bottom. Outside of foot reserved, lower body of vessel solidly glazed.

B10. Ill. 2. High, flaring pedestal, D. est. 0.14 (where base joins body), incomplete at lower end. Lower body and upper part of pedestal solidly glazed; lower part of pedestal reserved.

Handle

B11. Ill. 2. Worn fragment from curving belly with round, horizontally attached handle set at a diagonal. Handle probably glazed; beneath it six narrow, evenly spaced bands and a glazed area. Cf. a similar fragment from the vicinity of Pharai: Zapheiropoulos, 1956, pl. 89:β, left middle. For the handle cf. also Ithaka B 802.

Fragments of body

B12 (Π 849). Pl. 21. Themelis, 1965, pl. 251:γ, lower right. Narrow horizontal bands interspersed with decorative zones: at the top a zone of vertical lines making an angular jog near the center; near the middle a zone of running spirals and a broader band; at the bottom another band or area. Close parallels from the vicinity of Pharai: for the running spirals cf. Zapheiropoulos 1952, fig. 27 and *idem*, 1956, pl. 94:β; for the vertical lines making an angular jog cf. *idem*, 1952, fig. 18, and **B45** below.

B13 (Π 847). Pl. 21. Themelis, 1965, pl. 251:γ, center. Decoration on shoulder (from top to bottom): glazed band or area; zone of single-line meander; two narrow horizontal bands; zone or area with rectangular glazed designs. For the meander cf. an oinochoe from the vicinity of Pharai: Zapheiropoulos, 1952, p. 407, fig. 24 (= Coldstream, 1968, pl. 50:g).

B14 (Π 848). Pl. 21. Themelis, 1965, pl. 25:γ, center right. Decoration on shoulder: horizontal bands interspersed with two zones of carelessly drawn, rounded sigmas. For the sigmas cf. two vessels from the vicinity of Pharai: Zapheiropoulos, 1956, pl. 94:α, 1 and 2.

Other fragments, Pl. 21

B15A and **B**, two fragments probably from the pedestal of a krater (Themelis, 1965, pl. 251:γ, center,

shows part of one fragment). Cut-out area (fenestration) at right edge of fragment A. Painted horizontal line or band at top edge of fragments, set off by lightly incised, horizontal incision. Vertical painted line next to cut-out area on fragment A. Design of painted diagonal lines, some with barbed ends, one curving.

B16. From shoulder. Points of attachment of horizontal handle. Horizontal bands beneath handle zone.

B17. From shoulder. Narrow horizontal bands interspersed with a broader one; solidly glazed zone or area beneath.

B18, B19. From lower bodies. Closely set horizontal bands.

B20. From lower body. Solidly glazed.

ROUND-MOUTHED JUGS

This is one of the most frequent shapes; there are fragments of 30 or more.⁴ Three varieties are represented: tall with rounded shoulder (**B21, B22**), tall with angular shoulder (**B23**), and globular (**B24–B26**). The necks are usually fairly broad and either cylindrical or slightly spreading toward the top. The lip is everted and pronounced. The handle is oval or oblong in section and extends from the lip to the middle of the shoulder. All except **B24** have low ring bases.

Decoration is rudimentary. There is a zone of crosshatched triangles on the neck of **B21**, and bands and a wavy line on that of **B23**. Other fragments of necks, not illustrated, have a narrow reserved band below the lip. The lips of **B21** and **B23** have short radiating strokes on the

⁴ Assuming that none of the fragments of collar-necks with round mouths are from amphoras or hydriai. Two handles join the neck below the lip, however, and these may have been from amphoras like those from Ithaka (e.g. R 404) rather than from jugs. Arched horizontal handles from at least eight vessels were also found in the deposit, which suggests that some of the vessels here classified as jugs may have been hydriai; but these handles may also have been from "pithoi" like those found at Ithaka (e.g. R 401).

top. The bodies are covered or almost completely covered with glaze; most vessels have a few narrow reserved bands on the shoulder and a reserved band at the base. **B23** is the only example with a more elaborate scheme of bands.

Round-mouthed jugs are common in the West Greek area. For a discussion of the shape see Coldstream, 1968, pp. 226, 230–231. Our vessels are more closely paralleled in Ithaka than in Achaia. They are for the most part more simply decorated than those from Ithaka, however, and will probably emerge as typically Elean when more material is forthcoming from Olympia and elsewhere in Elis. They evidently continued to be used in Elis without any break, and with little change, during the 7th century and much of the 6th; cf. **C64–C71** below.

B21 (AP.100). Ill. 3, Pl. 22. Tall, with rounded shoulder. Missing about two-thirds of rim, parts of body and foot; mended and restored. H. 0.305, D. rim 0.11, D. base 0.10. Ovoid body; neck somewhat spreading; everted lip; low ring base; handle oblong in section. Decoration: radiating strokes on the top of the lip; reserved zone with crosshatched triangles just below lip, bordered by two vertical lines near handle; three narrow reserved bands on shoulder.

For the shape cf. Ithaka R 414 and Yialouris, 1963, pl. 135, center left (from Olympia), which, however, has a more curving handle. For the decoration cf. Ithaka R 413 (a narrower neck with similar triangles), an unpublished neck from Delphi (Coldstream, 1968, p. 226, note 6), and two jugs with crosshatched triangles on the shoulder from the vicinity of Pharai (Zapheiropoulos, 1952, fig. 24 = Coldstream, 1968, pl. 50;g; Zapheiropoulos, 1956, pl. 90;β).

B22 (AP.105). Pl. 22. Body like **B21**. Mended and partly restored. H. pres. 0.21, D. base 0.11. Reserved band at juncture with base; otherwise covered with black glaze.

Another jug from this well similar to **B21** and **B22** is not here republished: Themelis, 1965, pl. 251, upper.

B23 (AP.94). Pl. 22. Tall, with angular shoulder. About two-thirds preserved; H. 0.281, D. 0.184, D. rim 0.115, D. foot est. 0.085. Lower body nearly conical; shoulder rounded above the angle, flattened somewhat at the top where it meets the neck; flaring neck; rim markedly everted; low ring base. Handle missing but probably broad and flat, to judge by its juncture with the lip. Decoration: radiating strokes on the top of lip; reserved bands on the neck, one with a horizontal wavy line. On the body: five horizontal groups of narrow reserved bands alternating with broad painted zones.

For the angular shoulder cf. oinochoai from Ithaka (e.g. R 522, B 1026), which, however, have narrower necks. Cf. also Zapheiropoulos, 1952, figs. 23, 24 (from Pharai) and Coldstream, 1968, p. 230, note 7: all these Achaean vases differ from **B23** in having the greatest diameter at the base. For the banding on the body cf. especially Ithaka R 414, R 471, and B 872.

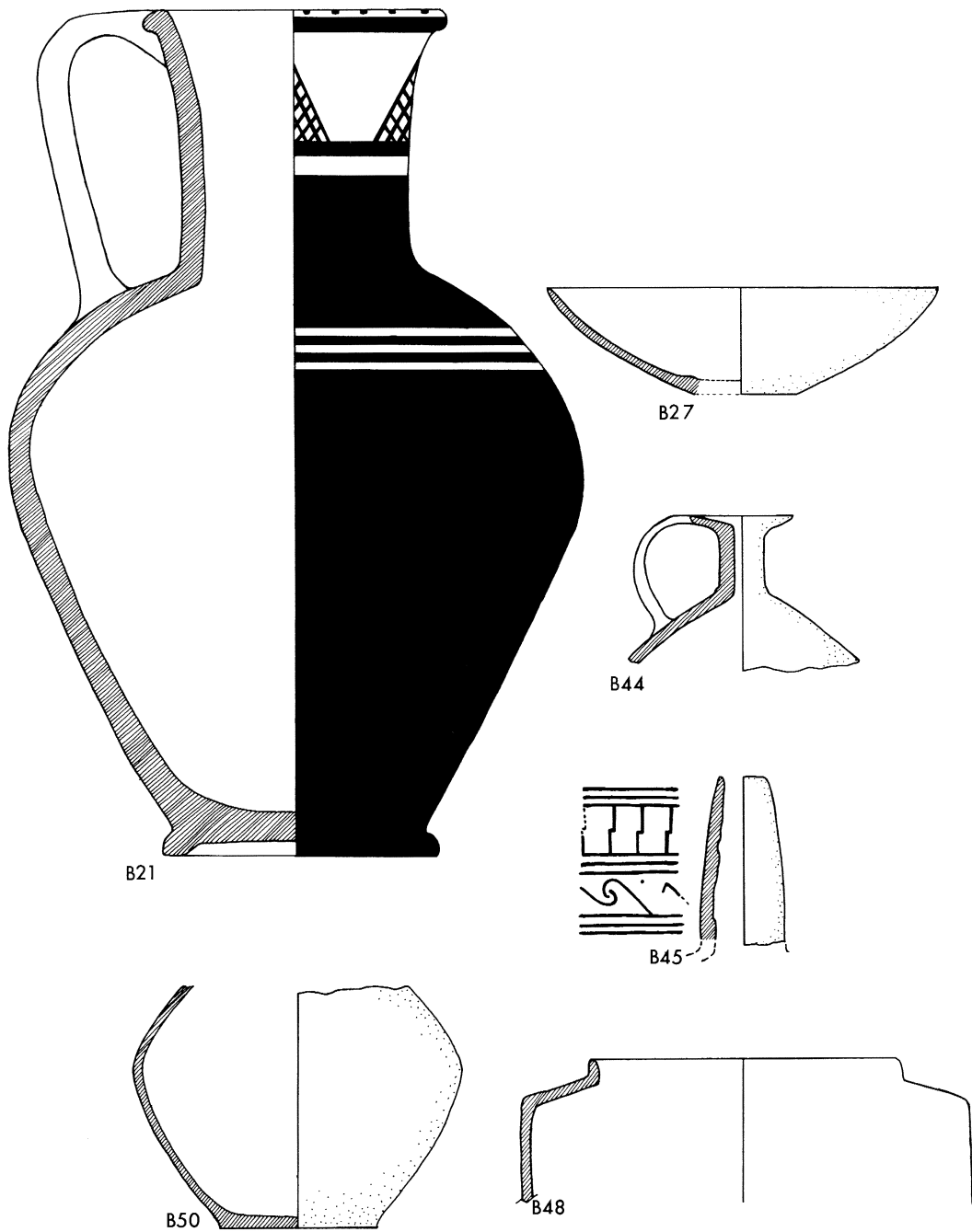
B24 (AP.99). Pl. 22. Nearly complete; mended and restored. H. 0.215, D. rim 0.10, D. bottom 0.09. Globular body; neck nearly cylindrical; lip only slightly everted; bottom flat; handle oval in section. Completely covered outside with black glaze. The shape is more nearly spherical than the usual squat, "baggy" jugs of Achaia (Coldstream, 1968, pp. 230–231), and the neck is broader. Very close to the Archaic version of the shape (e.g. **C64–C70**, below).

B25 (AP.89). Pl. 22. Globular, probably a jug. Mended and restored. H. pres. 0.151, D. base 0.124. Like **B24** but closer to spherical; low ring foot. Covered outside with black glaze except for a reserved band on the foot and four narrow reserved bands on the shoulder.

B26 (AP.87). Pl. 22. Globular, probably a jug. Mended and restored. H. pres. 0.13, D. base 0.10. Body squatter than **B24** or **B25**; approaching biconical. Decoration like **B25**. For the sagging form cf. an Archaic jug (**C71** below).

SHALLOW BOWL

B27 (II 840). Ill. 3, Pl. 23. Nearly complete; most of bottom missing; mended and restored. H. 0.041,



ILL. 3. Geometric pottery: miscellaneous fine ware. Scale 2:5

D. rim 0.143. Conical; swelling of uncertain purpose on inside near bottom. Black glazed.

KANTHAROI

All but one (**B32**) may be classified by the terminology used by Coldstream (e.g. 1968, p. 229) as broad. Within this general category there are two distinct types. The more common is shallow, with narrow ring base, spreading sides, high, strongly curved shoulder, offset, flaring lip (e.g. **B28–B30**), and ribbon handles which spring almost horizontally from the lip. The only decoration consists of a reserved band on the foot and two or three reserved bands at or just below the widest part of the body: otherwise they are black glazed except beneath the foot. **B28–B30** and those published by Themelis (see below) are unusually shallow for the Geometric period, although the shape does find close parallels in the West Greek area (see on **B28**). The ultimate models are probably Corinthian kantharoi of the Thapsos class (e.g. Coldstream, 1968, pl. 20:b). Since shallow kantharoi, however, are known at Argos as early as the Middle Geometric phase and are common in Late Geometric times (see Courbin, 1966, pls. 60–65), it is possible that the Argive form also exerted some influence on the Elean. Compare also the shallow cups **B33** and **B34**. The descendants of this type are to be seen in **C104–C107** below, from the Archaic deposit.

The second type of broad kantharos is represented by only one fragment, **B31** (unless **B50–B52** are also of this type). It is deeper than the preceding type, with a more gently curving, ovoid body, and the handles project less horizontally. Vessels like this are very common in the West Greek area, and the bands on **B31** are characteristic (see the parallels cited below). For a later version cf. **C108** and **C109** below.

B32 may be a kantharos of the tall type (cf.

Coldstream, *loc. cit.*), but it is too fragmentary to be sure.

B28 (AP.88). Ill. 4, Pl. 23. Broad, shallow. Parts of rim and body missing; mended and restored. H. 0.09, D. rim 0.145, D. base 0.057. Painted as described above. For the shape cf. Zapheiropoulos, 1952, fig. 20 (= Coldstream, 1968, pl. 50:e, called “abnormally shallow” on p. 229), Zapheiropoulos, 1956, pl. 91:a 3 (both from the vicinity of Pharai in Achaia) and **B 714** from Ithaka. The decoration of our examples probably imitates that of kantharoi like **B31**.

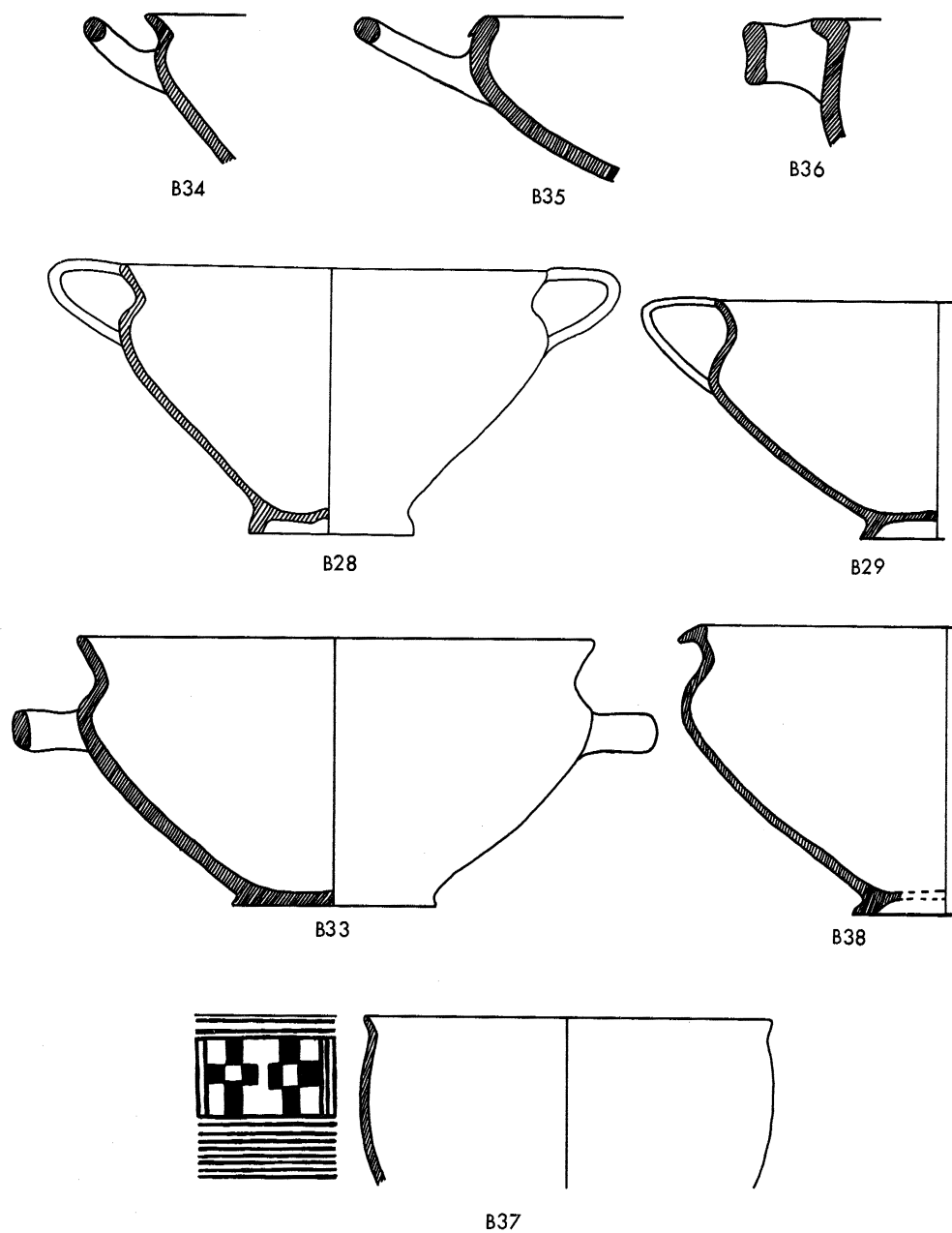
B29 (Π 834). Ill. 4, Pl. 23. Broad, shallow. Themelis, 1965, pl. 250, fourth row, right. Small pieces missing; mended and restored. H. 0.184, D. rim 0.158. Painted as described above.

B30. Pl. 24:a. Broad, shallow. Part of rim and shoulder only. D. rim est. 0.15. Two reserved bands on outside and three on inside of lip; otherwise black glazed.

Four other similar vessels from this well are not here republished: Themelis, 1965, pl. 250, second row, right; third row, right; fifth row.

B31. Pl. 24:a. Broad, deep. Part of rim and shoulder. H. pres. 0.067, D. rim est. 0.10. Three reserved bands on lip, four on body just below attachment of handle; otherwise black glazed. Cf. similar vessels from Achaia, e.g. Zapheiropoulos, 1952, fig. 10 (= Coldstream, 1968, pl. 50:f) and fig. 17, and Ithaka, e.g. R 352, R 354. Kantharoi of this type continue without a break into the 7th century; see Kunze, 1961, fig. 68, Gauer, 1975, pp. 164–168, and **C108**, **C109** below.

B32. Pl. 24:a. Tall(?). Handle with small part of rim and body. Handle has glazed horizontal bars and an X. Fine bands on body below handle. Inside black glazed except for three reserved bands at lip. For the decoration on the handle cf. Zapheiropoulos, 1952, A4, A5, B5, Γ1, Γ4. Probably of the tall type (Coldstream, 1968, p. 229), but not enough survives of lip and shoulder to be sure; possibly from a vessel like **B37**.



ILL. 4. Geometric pottery: fine-ware kantharoi and cups. Scale 2:5

CUPS

These differ from the kantharoi in that the handles are horizontally attached, either at the shoulder (**B33–B35**) or at the rim (**B36**). All are shallow. The profile of the rim varies considerably.

Few parallels for **B33** and **B34** are yet known in the West Greek area. They may have been an Elean speciality, although the shape probably originated in Corinth or Argos (see below). There are somewhat similar cups in the Archaic deposit (see below, **C129–C131**).

B33 (Π 833). Ill. 4, Pl. 23. Themelis, 1965, pl. 250, third row, left. Fragment preserving complete profile; mended and restored. H. 0.095, D. rim *ca.* 0.15. Profile like those of the shallow kantharoi. Handle projecting horizontally from shoulder, oval in section. Black glazed. The horizontal handles are probably a local peculiarity (cf. **C129** below, of the Orientalizing period); they may perhaps owe something to Protocorinthian models (e.g. Coldstream, 1968, pl. 20:d; Johansen, 1923, pl. XIX:2). Otherwise **B33** is similar in profile to the Geometric shallow “skyphoi” of Corinth and Argos (cf. **B34**).

B34. Ill. 4, Pl. 24:b. Fragment with profile like the preceding. H. pres. 0.05, D. rim est. 0.20. Handle rising diagonally from shoulder, round in section. Black glazed. Ithaka R 287 (from the Lower Deposit), a black-glazed cup, is similar but has a more upright lip. **B34** has a general similarity in profile to LG shallow “skyphoi” from Argos (Courbin, 1966, pls. 57, 58, top row) and from Corinth (which start in MG II, e.g. Coldstream, 1968, pl. 18:d, and continue in LG, especially in the Thapsos class, e.g. Coldstream, 1968, pl. 20:c).

A similar cup from this well is not here republished: Themelis, 1965, pl. 250, second row, left.

B35. Ill. 4, Pl. 24:b. Fragment with rounded shoulder, continuous with rim. H. pres. 0.056, D. rim est. 0.18. Handle rising diagonally from shoulder, oval in section. Groove on outside of rim. Black glazed. Unusually shallow. Ithaka R 292 is somewhat reminiscent; cf. also R 289, which, however, is

deeper. For a somewhat similar but perhaps unrelated form cf. a krater of the 6th century B.C. from Olympia (Gauer, 1975, pl. 25:1 = fig. 10:9).

B36. Ill. 4, Pl. 24:b. Fragment with broadly splaying rim, flat on the top. H. pres. 0.042, D. rim est. 0.22. Broad ribbon handle projecting horizontally from rim. Black glazed. The rim profile is somewhat reminiscent of **B38–B40** and some of the kraters (e.g. **B1**, **B5**).

KANTHAROI OR CUPS

(no evidence preserved for handles)

B37 (Π 871). Ill. 4, Pl. 24:a. Rim fragment. H. pres. 0.058, D. est. 0.14. Offset lip, nearly vertical side. Horizontal bands at lip. Panel on shoulder with crosslike checkerboard design framed by vertical lines; fine bands on body. Inside solidly glazed except for three reserved bands at lip.

The low lip is unusual. The arrangement of the decoration is perhaps ultimately derived from Corinthian LG, in which panels framed by vertical lines are common (e.g. Coldstream, 1968, pl. 19:c, f, g–l, pl. 20:b, c, e); there are also Ithacan imitations (e.g. R 298, R 313, R 357). Cf. also the elongated panels with fish on Zaphiropoulos, 1952, A 5.

I know of no parallels for the use of checkerboard squares arranged in a cross. Checkerboard panels, while common in Attic LG (e.g. Coldstream, 1968, pl. 10: g, h, k), are very rare in Corinthian; an unusual Corinthian vessel from Ithaka (R 44) has both vertically and horizontally elongated checkerboard panels. Checkerboard zones also sometimes occur in native Ithacan pottery (e.g. R 394, R 456).

B38 (Π 837). Ill. 4, Pl. 23. Themelis, 1965, pl. 250, first row, left. Fragment preserving full profile. H. 0.098, D. rim est. 0.18, D. base est. 0.065. Broadly splaying rim, turned out at a diagonal; ring base. Black glazed. The rim profiles of this and **B39** and **B40** are reminiscent of those of some of the kraters; cf. **B6**. Cf. also **B36**. Similar vessels with horizontal handles come from Phteri in Achaia (Zaphiropoulos, 1956, pl. 91:a, 2) and Ithaka (e.g. R 284).

A similar vessel from this well is not here republished: Themelis, 1965, pl. 250, first row, right.

OTHER FRAGMENTS

B39, B40. Pl. 24:a. Splaying rims like the preceding. Reserved bands at lip of **B39** and at lip and shoulder of **B40**.

B41–B43. Typical ring bases, **B43** with glazed circle on bottom.

MISCELLANEOUS SMALL VESSELS
WITH NARROW NECKS

B44 (Π 870). Ill. 3, Pl. 23. Upper part of aryballos. H. pres. 0.053, D. rim 0.036. Flat ribbon handle from flaring rim to shoulder. Unpainted. Cf. a vessel from Olympia with shorter, broader neck and painted decoration (Gauer, 1975, pl. 15:1; regarded [p. 114] as a local version of a Protocorinthian aryballos and dated about the turn from the 8th to the 7th century B.C.).

B45. Ill. 3, Pl. 24:a. Fragment of neck of narrow-necked juglet. Broken at top and bottom. H. pres. 0.06. Two zones of decoration, bordered and divided by three fine horizontal lines. Upper: vertical lines making an angular jog at the middle. Lower: running spirals, a dot, and a hook.

Juglets with similar necks are found in Corinthian in both Late Geometric and Protocorinthian periods. There are many examples from Ithaka (Robertson, 1948, nos. 166–216, 470–521; Benton, 1953, nos. 968–1011). Although I have found no exact parallel for the scheme of decoration, groups of narrow bands alternating with broader zones are common. For the spirals, cf. **R 484** (from the lower deposit); cf. also **B12** above. For the vertical lines making an angular jog, cf. Dunbabin, 1962, no. 353 (probably Protocorinthian); cf. also **B12** above.

Vessels of this type were presumably ancestral to the Elean tall-necked juglets of the 7th and 6th centuries B.C. (see **C84** below, and references there cited).

For the vertical lines making a jog and the spirals, cf. **B12**; for the hook, cf. **B15**.

B46. Pl. 23. Fragment of juglet or aryballos preserving junction of vertical handle with shoulder. H. pres. 0.045, D. max. 0.05. Black glazed.

B47. Pl. 24:a. Fragment of a spout from a trefoil-mouthed vessel. Worn, perhaps originally black glazed. Probably from a narrow-necked juglet similar to **B45**, to judge from its small size.

PYXIS

B48. Ill. 3, Pl. 24:a. Fragment of upper part. H. pres. 0.05, D. rim est. 0.21. Cylindrical body making an angle with shoulder; shoulder rising toward lip, which is upturned; place of attachment of horizontal handle on upper body. Decoration: blobs on lip; narrow concentric bands on shoulder; four vertical lines to right of handle zone on body. The shape is unique for the Geometric period. Cylindrical pyxides occur in Ithaka (e.g. **R 394**, **R 395**), but like their Corinthian models, they do not have conical shoulders. Cf. the Archaic pyxis **C136** below.

OTHER SMALL, RELATIVELY
CLOSED VESSELS

B49 (Π 872). Pl. 24:a. Fragment of upper part. H. pres. 0.07, max. D. est. 0.16. Globular. Fine bands on body; reserved zone on shoulder with regularly spaced, solidly painted motifs, of which only the nearly triangular base is preserved.

Aryballoi with globular bodies like **B49** begin at Corinth as early as the Early Geometric period (Coldstream, 1968, p. 93; cf. pl. 17:b and c from MG I) and develop eventually into the familiar Early Protocorinthian type. The latter frequently has a banded body like our fragment (e.g. Johansen, 1923, pl. 4; Payne, 1931, pl. 1:1). The motifs on the shoulder were presumably derived from or influenced by Protocorinthian, whether they are triangles (cf. the hatched or crosshatched triangles on Johansen, 1923, pl. 4, nos. 2–4, 9) or pothook spirals (cf. *ibid.*, pl. 14:4; Dunbabin, 1962, nos. 12, 35, and the conical oinochoe no. 217). Protocorinthian triangles or rays, when they are solidly painted, usually have contiguous bases, and pothook spirals are generally less closely spaced than our motifs; cf. also the spacing of the thinner rays on the lip of a cup from Pharaï (Zapheiropoulos, 1952, A4).

B50 (Π 836). Ill. 3, Pl. 23. Themelis, 1965, pl. 250, fourth row, left. Fragment of body and ring foot. H. pres. 0.085, D. base 0.054. Ovoid body solidly glazed outside. Lip perhaps like **B51** and **B52**. Perhaps a kantharos of the same type as **B31**; the inside of **B50** is unglazed, however, and the shoulder is higher and more angular.

Rim fragments

B51. Pl. 24:a. D. est. 0.12. Blobs on the top; four narrow bands on the outside of the lip and two on the inside.

B52. Pl. 24:a. Bands on the outside of the lip. Both this and the preceding might be from kantharoi of the same type as **B31**, but they are unglazed on the inside.

Coarse, Handmade Ware

This has a fairly light buff or reddish color. The surface is usually smoothed. Some pieces, such as **B54**, are well fired; others, especially the larger vessels, are sometimes rather soft and crumbly.

JUGS

B53 (AP.103). Pl. 24. Nearly complete; mended and restored. H. 0.21, D. rim 0.10. Globular body; round bottom; cylindrical neck with lip rising slightly toward the side opposite the handle; handle, oval in section, from lip to shoulder.

B54 (AP.107). Ill. 5, Pl. 24. Upper part only. H. pres. 0.13, D. rim est. 0.11. Clay finer than most handmade pots; well fired. Concave neck with flat, everted lip; oval handle from lip to shoulder.

B55. Ill. 5. Neck similar to **B53**.

Fragments of large basins or bowls with nearly cylindrical pedestals

B65. Pl. 24 (photographed upside down). From bottom of pedestal with incised decoration.

B66, **B67**. Ill. 5. From juncture of bowl and pedestal. **B66** has a cut-out part.

Fragments of rims of pithoi or other large closed vessels

B68–B71. Ill. 5.

B72. Ill. 5, Pl. 24. Fragment of pithos. Large horizontal handle with concave outer edge.

OTHER

B56 (AP.102). Ill. 5. Jug or jar (no handles preserved). Fragment preserving full profile. H. 0.205, D. rim est. 0.10. Round bottom; offset, everted rim.

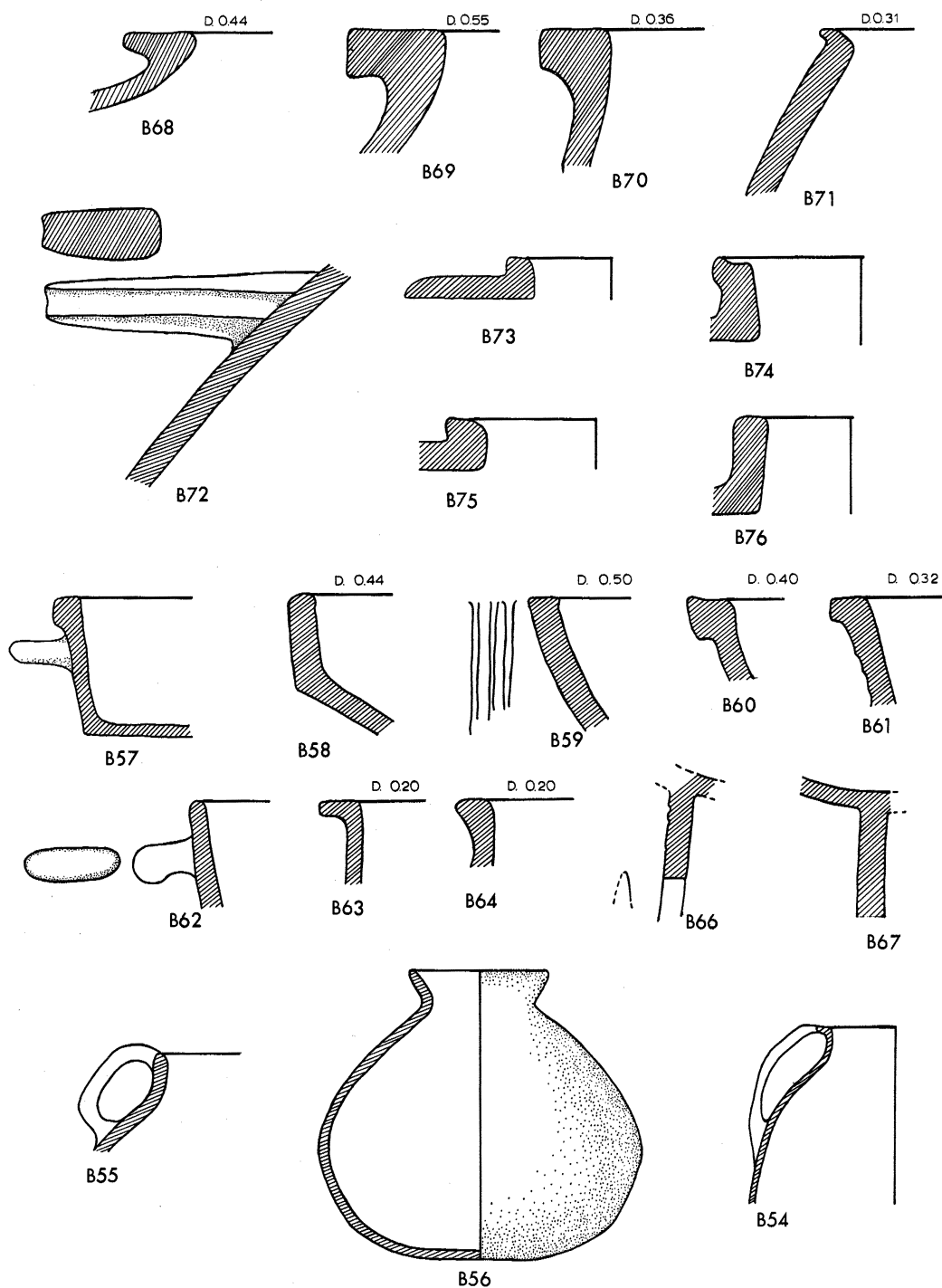
B57 (Π 850). Ill. 5, Pl. 24. Fragment of large oval basin. H. 0.10. Projecting rim, flat on top; round horizontal handle below rim.

Fragments of round covers (for pithoi?) (Ill. 5)

B73–B76. Openings in the center with collarlike rings projecting toward the top. Only **B73** preserves full profile.

Rim fragments of basins or large bowls (Ill. 5)

B58–B64. **B59** has vertical grooves with rounded ridges between; **B61** has horizontal grooves made with a finger; **B62** has an unpierced, horizontal ledge lug.



ILL. 5. Geometric Pottery: handmade coarse ware. Scale 1:5

OTHER TERRACOTTA OBJECTS

B77 (Π 867). Pl. 24. Terracotta spindle whorl. D. 0.068, max. Th. 0.019. Disk, pierced in center with a narrow hole. Reserved ring on one side with spokelike lines; otherwise black glazed.

B78 (AO.381). Pl. 24. Terracotta loom weight. H. 0.062, W. 0.033, Th. 0.02. Tall, flattened pyramid, pierced near the top.

COMMENTARY

It is apparent from the comparisons cited above that our Geometric pottery is closely related to that already known from the West Greek area.⁵ The sequence of styles is best known from the British excavations on Ithaka (Robertson, 1948; Benton, 1953). Pottery of this period has turned up only sporadically at Olympia, although the recent publication of finds from wells by Gauer (1975) has produced some useful chronological information. Elsewhere in this area the Geometric period is much less well attested. The only significant discoveries in Achaia and Messenia come from less than a dozen tombs.

The scarcity of comparable material from the immediate vicinity is somewhat offset by the fact that pottery styles of the whole West Greek area were both conservative and closely interrelated. The area had a strong local Protogeometric tradition, and a true Geometric style did not develop until the time of the Late Geometric phase in Corinth and Attica; thus LG I in the West Greek area follows immediately upon Protogeometric. The impetus for the development of a Geometric style, insofar as it came from the outside at all, came mainly from Corinth. This is especially apparent on Ithaka, where many Corinthian imports were found side by side with local imitations. West Greek LG I was influenced by Corinthian Late Geometric, West Greek LG II by Early Protocorinthian. Corinthian influence was stronger on decoration than on shape. A preference for kantharoi and round-mouthed jugs, which developed locally in their own way, is particularly noticeable. Even in the case of decoration, Corinthian motifs were usually adapted to local tastes rather than closely imitated; this adaptation generally took the form of simplification of both motifs and syntax.

The Geometric pottery from Elean Pylos apparently belong to the LG II phase as defined by Coldstream (1968, pp. 228–232). The closest parallels which have yet come to light are from Achaia, where the same “thin stacatto style” of decoration (*ibid.*, p. 232) is to be seen (see the comparisons cited for **B12–B14**, **B21**, **B23**, **B28**, **B31**, **B32**, **B38**) and from Ithaka (see especially for **B21**, **B23**, **B38**). There are some differences, however: jugs with the greatest diameter at or near the bottom, which are common in Achaia (e.g. Zapheiropoulos, 1952, pp. 405–406, Γ 4–6), do not occur in our deposit nor do kantharoi with tall lips (e.g. Zapheiropoulos, 1952, pp. 401–402, Α 4—Α 6). Our pottery will probably be seen to be typically Elean when more comparative material is published from the district of Elis.

External influence appears to have been very indirect; Corinthianizing tendencies such as banding (e.g. **B2**, **B3**, **B11**, **B12**, **B14**, **B16–B19**, **B23**, **B32**, **B49**), running spirals (e.g. **B12**, **B45**), and zones or clusters of sigmas (e.g. **B14**) are common throughout the West Greek area and do not point to any specific connection between our site and Corinth. The

⁵ See the excellent summary in Coldstream, 1968, pp. 220–232.

motifs on the shoulder of **B49** may reflect Early Protocorinthian, but there is no exact correspondence. Direct influence is to be seen only in the ship on **B1**, which was probably inspired by Attic or, less likely, Corinthian models.

Our deposit gives no hint that the Orientalizing period was very far advanced in Corinth and Attica. The ornaments are all essentially “geometric”. Running spirals and rounded sigmas (**B14**), for instance, occur already in Late Geometric in Corinth on vessels of the Thapsos class (Coldstream, 1968, pp. 102–104). Some of the parallels with Ithaka, furthermore, are with vessels associated with the Lower Deposit (cf. **B21**, **B23**, **B38**), which Coldstream assigns to LG I. Our deposit is probably best dated to the early part of LG II; in absolute terms it may be dated about 720–700 B.C. according to the chronology proposed by Coldstream (*ibid.*, pp. 329–330).

PART C. ARCHAIC

One of the most significant discoveries at Elean Pylos was a well containing an extensive deposit of the 7th and 6th centuries B.C.¹ The well is situated in a field to the northeast of the hill Armatova (Area F 2 on Map 3; cf. Pl. 11:c) where also were found the remains of a cemetery of the Roman era (see Part E below); some of the graves were built almost immediately above the well (Ill. 23, p. 126 below).

The well was unlined, and its preserved depth was *ca.* 7.7 m. (Fig. 5:b, Pl. 11:a, b). The original level of its top could not be determined. The uppermost part of the alluvial deposit through which it was cut consisted primarily of clay, the lowermost of clay and small stones. The well was circular in plan and had an original diameter of *ca.* 1.60 m. to 1.70 m.; the walls of the lowermost third had become extensively undermined before it went out of use, however, forming a nearly bell shaped cavity with a maximum diameter of *ca.* 3.90 m.

In order that we might safely excavate the lower part of the well it proved necessary to remove a considerable volume of virgin clay around the circumference of the upper part (Pl. 11:a). The fill in the well was fairly homogeneous, and no stratum was reached at the bottom which could be dated to the time of its use. The fill consisted primarily of earth, small stones, occasional large stones (one visible in Pl. 11:b), much broken pottery and many terracotta roof tiles, and a moderate quantity of other artifacts. This filling had not built up gradually over a long span of time, to judge by the fact that joining fragments of many pots were found scattered throughout the deposit (some almost from top to bottom). Although all the earth was sifted and there was a diligent search for joins, few pots turned out to be complete, or even nearly complete. It is therefore likely that the well was deliberately filled in at one time with material which already included the pot sherds and other artifacts.

The source of the material used to fill the well poses a problem. A few Archaic sherds were found within the shallow deposit in the environs of the well but always mixed with later sherds (cf. the Archaic sherds **D267–D271** found in the well of the Classical period in Area F4). The character of the pottery and other artifacts from the well suggests that they originally served for household use; all appear to be of local manufacture, and there is no evidence to suggest that they might have been dedications at a shrine or have been used for any purpose other than domestic. The parallels from Olympia and elsewhere suggest that the pottery was manufactured over a long span of time, perhaps so much as a century (see below). The most plausible explanation is that there was once substantial deposit in the vicinity of the well, which resulted from domestic occupation in the Archaic period and which served as a source for the filling. If so, we must then suppose that this deposit had

¹ This part deals only with the Archaic finds from the well. A few other Archaic pieces are included in Part D below: **D267–D271**, **D314**. The term “Archaic” is used here for convenience to refer to all finds from the well, even though the earliest might more accurately be described as “Orientalizing”.

almost completely disappeared by the Classical period.² Flooding and erosion could easily have had such an effect, since all the remains in the vicinity are situated in the flood plain of the Peneios River. The well of Geometric date discussed above (Part B) is similar in that no contemporaneous remains were found in its vicinity.

The finds, in addition to the Elean fine ware which is described first, include a single fragment of a vessel with black-figured decoration (**C184**) which was probably made locally, to judge from the fabric. A significant quantity of coarse ware was also recovered, a representative selection of which is described below (**C185–C192**), and fragments of Laconian-type roof tiles. The tiles, which have glazed surfaces and are clearly of high quality in fabric and workmanship, are quite similar, in general, to the pottery. For the broader significance and chronology of the deposit, see the Commentary, pp. 64–65 below.

CATALOGUE

POTTERY

Fine, Black and Plain Ware (Elean)

Fine pottery generally similar in fabric to the Geometric pottery described in Part B above and evidently all made locally comprised about three quarters of all the pottery from the well (about 17 tinfuls out of a total of 23). The surface of the fine ware is well smoothed and often coated with a light-colored, almost white slip. The glaze-paint is rather thinly applied and varies from black to dark brown. Whatever its color, it is usually fairly shiny and often has a metallic sheen; occasionally there are red splotches because of misfiring. In general the quality of manufacture is high. All the fine pottery is wheelmade.

Decoration, when it occurs, is usually simple. A few vessels were merely covered with black glaze (e.g. **C51**, **C67**, **C104**, **C108**, **C132**, **C133**); others, particularly the round-mouthed jugs, were completely covered except for a few narrow reserved bands, strategically placed (e.g. **C52**, **C64–C66**). Bands of red, usually between 0.005 and 0.01 m. in height, flanked above and below with one or two narrow white bands, occur fairly frequently on otherwise black-glazed vessels (e.g. **C3**, **C47**, **C59**, **C60**, **C102**, **C114**, **C115**). Red bands, similarly flanked with white bands, are also found on many of the vessels with dark-on-light decoration. White by itself also plays an important part in the decoration of oinochoai (the eyes on the spouts, e.g. **C75**, **C76**, **C78**, **C79**, **C81**) and some kraters (e.g. **C4**) and kantharoi (e.g. **C110–C113**). The use of red and white reaches a climax in the lotus on **C2**.

Dark-on-light decoration is confined to a few shapes (although it is by no means the exclusive form of decoration in these shapes). Most frequent and striking is the hemispherical bowl, usually with reflex handles (e.g. **C26–C46**; see general description below). Other shapes so decorated

² No substantial Archaic deposit was found beneath the near-by house of Classical date excavated in Area F 4; see Part D.

include plates (e.g. **C54–C56**), tall-necked juglets (e.g. **C84**), and vessels with conical necks (e.g. **C85**). Zones of decorative motifs are often bordered by horizontal glazed bands, the latter commonly overlaid with red and white bands. Larger motifs are often further embellished with white lines and dots (e.g. **C26–C32**, **C41**, **C46**, **C55**). The most rudimentary form of decoration is that of horizontal zigzags within a narrow reserved zone on vessels otherwise black glazed (e.g. **C7**, **C72**). Narrow zones are also common in positions subordinate to the main decorative zone; they may contain zigzags (e.g. **C26–C29**), dots (e.g. **C16**), diagonal strokes (e.g. **C36–C38**), interlocking loops (e.g. **C39**, **C40**, **C157**, **C158**), and sigmas (e.g. **C9**). Simple rays occur on a stand (**C8**) and probably on the lower parts of bodies (**C154**, if not from a stand, possibly **C159**). Rays also occur in combination with other motifs (e.g. **C57**, **C155**). Where there is a main decorative zone, the motifs are usually simple and abstract; most common are lozenges (e.g. **C26**), vertical crescents (e.g. **C26**, **C27**), pot-hook spirals (e.g. **C30**), and horizontal S-curved loops (e.g. **C27**, **C46**); less common are petallike forms (e.g. **C28**) and spiral loops (e.g. **C29**). Kraters sometimes have processions of birds (e.g. **C15–C19**; cf. **C161**), and there are examples probably of fish (**C146–C149**). Plates may have stars (e.g. **C54**) or fanciful floral patterns (e.g. **C55**). A single example of a glazed circle or “sausage” (**C174**) is evidently a carry-over from the Geometric period. There are only two instances of human figures (**C1**, **C54**). A few other motifs occur on sherds (see below under “Other sherds”, p. 59).

KRATERS

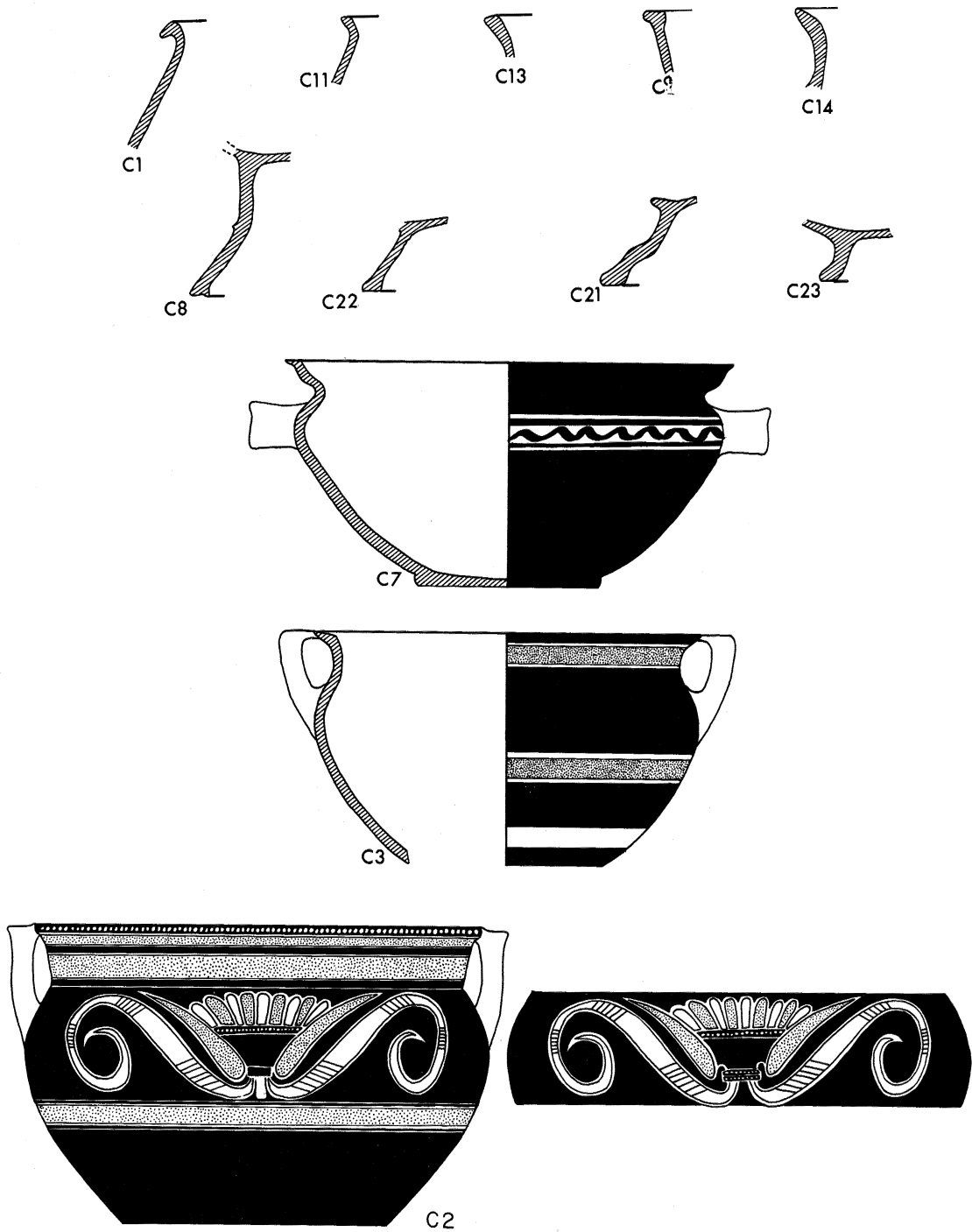
There are at least three types. The first, to which only the fragment **C1** may be assigned, is a descendant of the Geometric form (see above, **B1–B20**); the decoration on **C1** clearly dates it to the 7th century B.C., and it therefore cannot be regarded as a stray from an earlier age. The second type (**C2–C6**) comprises those with distinct neck and flaring rim. The handles were mostly of the “column” form, to judge by **C2–C5**, but the possibility cannot be excluded that some also had “stirrup” handles (cf. **C25**). The decoration consists of red bands flanked with white on a solidly glazed ground and, on one vessel (**C2**), a more elaborate light-on-dark floral design. The third type we have chosen to call the “cup-krater” because it resembles a gigantic two-handled cup; only the nearly complete example **C7** is described below, but several other closely similar vessels are represented among the uncatalogued fragments. The fragments **C8–C25** are all from large open vessels, but none is well enough preserved to permit a reconstruction of the complete form.

GEOMETRIC TYPE

C1 (AP.62). Ill. 6, Pl. 26. Coleman, 1968, fig. 7; *idem*, 1969, pl. 161:c. Fragment of rim and shoulder. H. pres. 0.093, D. est. 0.28(?). Shallow horizontal groove outside below lip. Inside and upper surface of rim black. Narrow horizontal band on outside below groove. On shoulder: fragmentary figure of bearded man, facing left and drawing sword. Outline drawing except for arm and sword, which is in silhouette. Drawing very careful and precise. Man's mouth partly open; nostril indicated by hooked line. The curving line in front of the man is probably the tail of his adversary (lion?).

The shape recalls that of local Geometric kraters (see above, **B1–B20**), from which it is clearly descended. Two 7th-century B.C. examples from Olympia (Kunze, 1961, figs. 70, 71; Gauer, 1975, pl. 23:1) have more distinct necks and show greater influence from Corinth.

The drawing has some similarity in style with Protoattic of the mid-7th century B.C. For the mouth cf. Eilmann and Gebauer, 1938, pl. 5, no. 1 (A); for the face in general, cf. Brann, 1962, no. 543 (Ram Jug Painter), Eilmann and Gebauer, 1938, pls. 32, 33 (A42, the “Menelas” stand), and Odysseus and



ILL. 6. Archaic pottery: fine, black and plain (Elean) kraters. Red paint indicated by stippling. Scale 1:5

his men on the Eleusis Amphora (Arias, Hirmer, and Shefton, 1962, pl. 13). In Protoattic, however, warriors and hunters are not usually shown drawing their swords, and the lack of filling ornament in our piece is un-Attic.

WITH DISTINCT NECK

The general shape, which is derived from Corinthian and Laconian prototypes, is found in local Elean fabric at Olympia (Gauer, 1975, pp. 134–137).

C2 (AP.84). Ill. 6, Pl. 25. Column krater. Coleman, 1968, fig. 4. Missing about one half, including base, one handle, part of the other handle, and part of rim; mended and partly restored. D. rim 0.34, H. pres. 0.23. Ridge on outside at junction of everted rim and neck. Solidly glazed inside and outside.

Decoration. Rim: red band edged with narrow white bands on the top, vertical stripes on the outside edge, narrow red band beneath the everted lip. Neck: broad red band flanked with pair of narrow white bands. A large lotus flower in shoulder zone on each side: petals, alternately white and red and flanked with white lines, spring from a band with white dots; the calyx leaves, red and flanked with white lines, spring from a rectangular form at the base of the calyx. From the underside of the rectangular form spring a pair of long leaves, white and flanked with white lines, with groups of cross-strokes in red at intervals. On one side of the vessel a white tongue depends from the center of the rectangular form; there was probably no corresponding tongue on the other side. Details of the rectangular form at the base of the calyx are clear on only one side of the vessel (Ill. 6, right): it is divided into two horizontal zones, each containing a row of white dots. Beneath the handles: red band flanked with pairs of narrow white bands.

Very similar in shape and decoration to an Elean krater from Olympia: Gauer, 1975, pl. 24:1 (profile, fig. 10:5; lotus decoration, fig. 5:2). A similar lotus plant occurs on another krater from Olympia (Hampe and Jantzen, 1937, fig. 15), which has never been fully published. The Olympia lotuses are

simpler in design, with fewer petals; the second one mentioned is closer to **C2** than the first (cf. especially the rectangle at the base of the flower). A plate (**C55** below) has a somewhat similar lotus.

C3 (AP.86). Ill. 6, Pl. 25. Column krater. Coleman, 1968, fig. 3. Missing base, part of rim, and other pieces; mended and partly restored. H. pres. 0.176, D. rim 0.30. Solidly glazed inside and outside. Red bands edged with narrow white bands on neck and beneath handle; broad white band on lower body. Somewhat taller than **C2**, with more spreading handles. Close in shape to Gauer, 1975, pl. 23:2 (= fig. 10:3), which also apparently had similar decoration (*ibid.*, p. 134).

C4 (AP.113). Pl. 25. Column krater. Upper body, neck, and rim preserving attachment of handle at left side. H. pres. 0.11, D. rim est. 0.03. Red band flanked with pairs of narrow white bands inside neck, outside neck, and below handles; white strokes on the top and outer edge of rim. Decoration in white on shoulder zone: pairs of vertical lines enclosing vertical zigzag near handles (cf. **C6**); broader curving line to right, perhaps part of lotus leaf (cf. **C2**).

C5. Pl. 25. Upper body, neck, and rim with handle. Red band flanked with narrow white bands on neck; red band flanked with pairs of narrow white bands beneath handle.

C6. Pl. 25. Lower body (perhaps the same vessel as **C5**). Vertical zigzag near two narrow, vertical white lines (cf. **C4**); beneath is a red band flanked with pairs of narrow white bands.

"CUP-KRATERS"

C7 (AP.83). Ill. 6, Pl. 25. Small pieces missing; mended and restored. H. 0.165, D. rim. 0.342. Disk base, flaring rim, two large horizontal strap handles. Paint varying from dark brown to black. Broad reserved band inside lip; reserved zone between handles with horizontal zigzag between narrow horizontal lines; otherwise painted inside and outside except beneath base. Very similar in fabric and technique to the hydria **C72**, which may have been made by the same potter.

Kraters of similar shape are common at Olympia in the late 5th century and 4th century B.C. (Gauer, 1975, pp. 139–141, pl. 27, fig. 11). Of the latter Gauer remarks (p. 139) “*Deutlich ist der Zusammenhang mit dem frühklassischen elischen Schüsseln.*” C7 was presumably derived in a similar way from earlier Elean cups like B33 or from contemporary(?) ones like C133.

FRAGMENTS NOT ASSIGNABLE TO SPECIFIC TYPES

C8 (AP.78). Ill. 6, Pl. 26. Fragment of attached stand, probably from a krater. Mended. H. pres. 0.104, D. foot 0.21. Cylindrical with flaring foot; ridge at junction with foot; deep groove beneath resting surface; bored hole near top of cylindrical part. Vessel glazed on inside. Decoration on stand: horizontal bands and zigzag on cylindrical part; horizontal bands and inverted rays on flaring part; at juncture of two parts, broad black band on which is a red band flanked with narrow white bands.

For the rays, cf. C154 and possibly C159. The stands of two kraters from Olympia are somewhat similar but differ in that they are flaring rather than cylindrical and rest on flat rather than conical feet. One is of a local type with “Subgeometric” decoration and probably dates to the mid-7th century B.C. (Kunze, 1961, figs. 70, 71; cf. Gauer, 1975, p. 134); the other, which is influenced by Corinthian types, is without decoration and dates to the first half of the 6th century B.C. (Gauer, 1975, pl. 23:1; cf. p. 134).

Rims

C9. Ill. 6, Pl. 26. Lip thickened and everted, with painted stripes on the top; multiple sigmas on neck.

C10. Pl. 26. Similar to preceding but glazed on the top; multiple chevrons on neck.

C11. Ill. 6, Pl. 26. Everted lip. Part of painted crescent or circle on outside.

C12. Pl. 26. Similar to preceding. Red band at juncture of lip and body.

C13. Ill. 6, Pl. 26. Everted lip with painted blobs on outside.

C14. Ill. 6, Pl. 26. Flaring lip with stripes on the top. Horizontal zigzag between narrow bands on neck; small dots on upper shoulder with narrow band beneath.

Shoulders

C15 (AP.118). Pl. 26. Reserved panel containing at least two birds in brown glaze with white lines for outlines and wings; two narrow, vertical white lines over glaze at right edge of panel; red band flanked with narrow white band near bottom of fragment. C16–C18 probably, C19 and C20 possibly from the same vessel.

A fragment of a small, open vessel (C161) has a similar bird. For other somewhat similar birds from Olympia cf. Schiering, 1964, pl. 60, no. 12 (described on p. 161 as “*Bruchstück von Schale oder Deckel*” and dated to “*kaum vor der Mitte des 7. Jahrhunderts*”); the bodies, which have a lattice pattern in red on a glazed silhouette, are especially close. A small jug in local fabric from Olympia also has birds with rather similar bodies in black-figure technique (Gauer, 1975, pl. 15:4–6; cf. p. 112). Birds are also represented on the shoulder of a “giraffe-necked” jug from Olympia (Gauer, 1975, pl. 13:3; cf. p. 110), but they are too poorly preserved to warrant comparison.

C16. Pl. 26. Probably from the same vessel as C15. Row of dots framed with narrow horizontal bands near juncture with neck; beneath is another band and part of tail(?) feathers.

C17. Pl. 26. Probably from the same vessel as C15. Bird’s breast in panel. Two narrow vertical white lines over glaze at right edge.

C18. Pl. 26. Probably from the same vessel as C15. Left edge of panel with similar white lines; horizontal row of dots near juncture with neck.

C19. Pl. 26. Possibly from the same vessel as C15. Bird’s foot (?); bands beneath.

C20. Pl. 26. Possibly from the same vessel as C15. Horizontal row of dots near junction with neck; solid black beneath (fragment near handle?).

Pedestals and feet

C21. Ill. 6, Pl. 26. D. foot est. 0.20. Glazed bands on outside.

C22. Ill. 6, Pl. 26. D. foot est. 0.18. Solidly glazed on outside with white band near bottom.

C23. Ill. 6. Ring foot.

Handles

C24. Pl. 25. Round, horizontal. Vessel solidly glazed inside and outside.

C25. Pl. 25. Stirrup handle (or possibly horned handle; cf. Gauer, 1975, pl. 25, no. 4). Vessel solidly glazed inside and outside.

BOWLS

DECORATED WITH DARK-ON-LIGHT PATTERNS

Bowls of this group usually have a rim diameter between 0.20 m. and 0.26 m. They have low ring feet and rounded sides. The lips are usually thickened a little toward the inside, and the flat upper surface also inclines toward the inside. A pair of handles is placed horizontally at the rim, and they often turn back a little after joining with the rim to form a plastic extension on either side.³

The decoration is fairly standardized: a horizontal zigzag or dots in a reserved zone at the rim; beneath that a broad band of glaze on which is a red band, edged with white; a broad reserved band on the lower body containing various motifs in glaze with white and red embellishments, usually alternating in pairs (e.g., lozenge and crescent, horizontal S and crescent); beneath these, near the junction with the base, a band of glaze on which are red and white bands. Some vessels also have bands or other decoration beneath the foot or on the top of the rim.

The fragments show that there is some

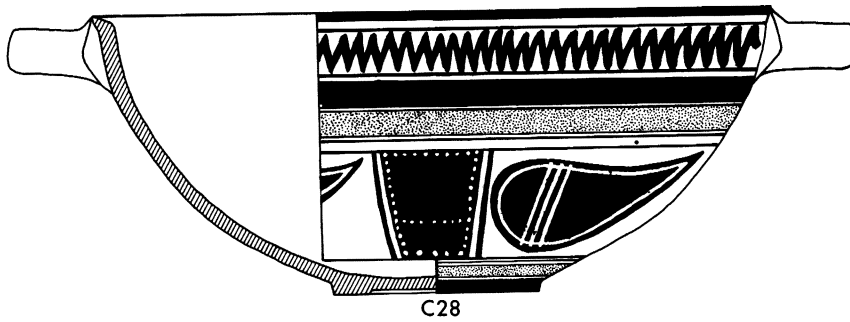
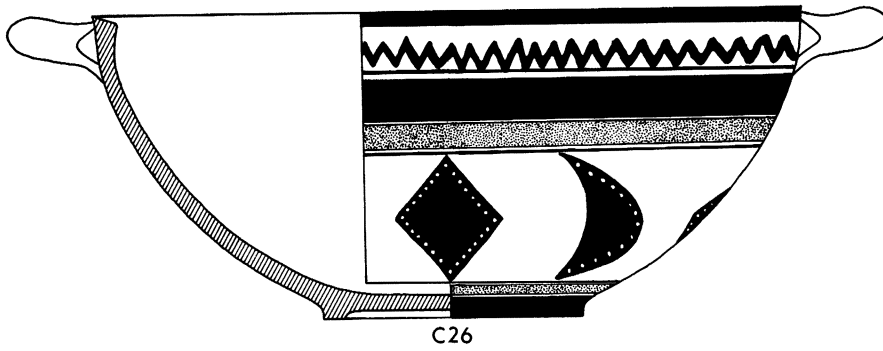
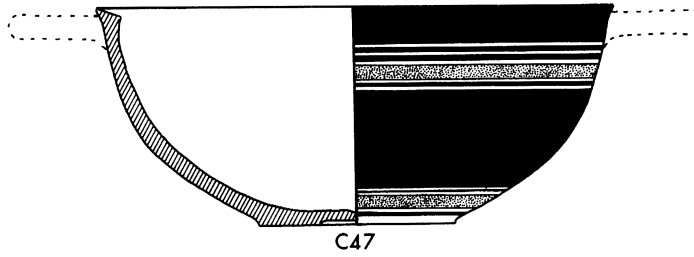
variation: the zigzag or dots at the rim may be replaced by spiraliform decoration (e.g. **C39**, **C40**); the broad reserved band may be divided into panels (e.g. **C29**).

A number of examples of this type are known from Olympia (e.g. Hampe and Jantzen, 1937, pl. 4, below; Kunze, 1961, fig. 65; Gauer, 1975, pls. 30:6, 32:5), and both shape and decoration are clearly a local Elean specialty (cf. the general remarks in Gauer, 1975, pp. 151–153). Best preserved is Kunze, 1961, fig. 65, which is very close in shape to **C26–C29**. Gauer dates the earliest examples from Olympia to the “*alterarchaische Zeit*” (1975, p. 151; the oldest of the wells he published in which such bowls are found, 37 SO, is dated on p. 243 to the second quarter of the 6th century B.C.). Many of those from Elean Pylos are likely to be somewhat earlier, to judge from the greater range and prominence of “orientalizing” motifs; further comparisons are given under the individual catalogue entries.

For zones with similar alternations of motifs cf. **C55**, **C84**, **C136**.

C26 (AP.74). Ill. 7, Pl. 27. Coleman, 1968, fig. 2. Missing some fragments; mended and restored. H. 0.101, D. 0.236. Low ring foot; rounded sides; thickened lip with flat upper surface inclined toward the inside; two round, horizontal reflex handles at lip. Inside coated with brown glaze except for reserved circle at bottom. Upper surface of lip reserved, with radiating glazed strokes. Outside: horizontal zigzag in reserved zone on rim, framed with narrow glazed bands; beneath this a narrow glazed band, near the lower edge of which is a red band, edged with narrow white bands; broad reserved zone on lower body with alternating lozenges and crescents in brown glaze, edged with white dots; beneath this and extending to foot, a glazed band near the upper edge of which is a red band edged with narrow white bands. Beneath foot: glazed except for resting

³ Such handles are called “reflex” handles in this catalogue; Gauer (1975, pp. 149, 153) calls them “*Omegahenkeln*”.



ILL. 7. Archaic pottery: fine-ware bowls. Red paint indicated by stippling. Scale 2:5

surface; circle of red at center, outlined by two white rings.

Very close in shape and syntax of decoration to Kunze, 1961, fig. 65, which probably dates to the first half of the 6th century B.C. (cf. *ibid.*, pp. 122–127; Gauer, 1975, p. 151). For the crescents, cf. **C27**, **C31**, and **C146**; for the lozenges, cf. **C55**.

C27 (AP.49). Pl. 27. H. 0.099, D. rim est. 0.21. Shape similar to preceding but with broader standing surface. Inside covered with brown glaze. Upper surface of lip reserved, with radiating glazed strokes. Decoration on outside generally similar to preceding; the broad reserved zone on the lower body contains alternating horizontal S's and crescents in black glaze, picked out with white dots. For the crescents cf. the preceding and **C31**; for the S's cf. **C55**.

C28 (AP.133). Ill. 7, Pl. 27. About two-thirds missing; partly restored. H. 0.085, D. rim 0.225. Shape similar to two preceding examples. Inside covered with black glaze. Upper surface of lip has radiating glazed strokes in reserved zone between black bands. Decoration on outside generally similar to preceding example. Broad reserved zone on lower body contains diagonal petals alternating with nearly rectangular motifs flanked by narrow glazed lines (cf. **C30**); the petals are further embellished with white lines and the nearly rectangular shapes with white dots. Beneath foot: glazed except for standing surface; ring or circle of red over glaze, outlined toward the outside with two white rings.

C30 probably had a similar rectangular motif, there alternating with pothook spirals. There appears to be a diagonal form somewhat similar to the petals on **C28** in the uppermost zone of Gauer, 1975, pl. 30:6; the piece is described in general terms in his text (p. 153; here and in the *Verzeichnis der Tafeln* the reference to the plate is erroneously given as pl. 30:5), but the relevant motif is not mentioned.

C29 (AP.124). Pl. 27. About one-third missing. H. 0.09, D. rim 0.20. Shape similar to the preceding but with higher ring foot. Inside covered with brown glaze. Upper surface of lip reserved, with radiating glazed strokes. Decoration on outside generally similar to preceding three examples. The reserved band at rim contains dots rather than zigzags. The broad

reserved zone on the lower body is divided by vertical glazed bands into panels, probably two on each side; the vertical glazed bands are embellished with five narrow, vertical white lines; within each panel is a spiral loop embellished with white dots. For the dots in the reserved zone at the rim cf. the somewhat larger glazed strokes on Gauer, 1975, pl. 32:5 (described on p. 153 as "*eine Reihe von aufrecht stehenden Blättern.*")

FRAGMENTS

Rims with glazed zigzag near lip

C30 (AP.65). Pl. 26. D. est. 0.24. Pothook spiral alternating with nearly rectangular motifs flanked by narrow glazed lines (cf. **C28**); motifs embellished with white dots; radiating strokes on top of rim. A fragment of a similar bowl from Olympia (Hampe and Jantzen, 1937, pl. 4, below) has a similar pothook spiral, apparently alternating with another motif. For the spiral cf. also **C84**.

C31. Pl. 26. Crescent(?) embellished with white dots; radiating strokes on top of rim.

C32. Pl. 28. D. est. 0.26. Part of tendril or S with white dots; radiating strokes on top of rim.

C33. Pl. 28. D. est. 0.24. Lip projecting toward outside.

C34. Pl. 28. D. est. 0.22. Looplike zigzag.

C35. Pl. 28. Zigzag carelessly drawn.

Rims with glazed dots or diagonal strokes near lip

C36. Pl. 26. D. est. 0.22. Oval shape surrounded by narrow line, probably in panel; radiating strokes on top of lip. For the decoration on outside of rim, cf. Gauer, 1975, pl. 32:5.

C37. Pl. 28. D. est. 0.18. Simple horizontal handle. Radiating strokes on the top of the lip.

C38. Pl. 28. D. est. 0.17. Like preceding.

Rims with other patterns near lip

C39. Pl. 28. D. est. 0.34. Interlocking loops near lip (cf. the following and **C157**).

C40. Pl. 28. D. est. 0.22(?). Interlocking loops near lip like preceding; radiating strokes on top of lip.

C41. Pl. 26. Part of reflex handle. Two curving areas of glaze, partly overpainted with red, outlined with white; between them a glazed tendril with white dots.

Bases

C42. Pl. 26. Curving line and areas of glaze on lower body (floral motif?); reserved beneath except for narrow band on inside of foot.

C43. Pl. 26. Alternating crescents and triangles (? or pothook spirals?) on lower body; reserved beneath foot.

C44. Pl. 28. Four triangular strokes of glaze on broad resting surface; glazed circle at center.

C45. Pl. 28. Zone of dots on lower body. Glazed dots on resting surface; glazed beneath foot.

Body fragment

C46. Pl. 28. Horizontal S's, alternating with another curving form outlined with narrow line parallel to edge; embellished with white dots.

BLACK GLAZED

Similar in shape to the preceding group, with simple decoration in red and white.

C47 (AP.70). Ill. 7, Pl. 28. Missing handles and small fragments; mended and partly restored. H. 0.072, D. 0.172. Attachments of two round horizontal handles preserved. Covered with brown glaze inside and outside except beneath foot. Red band beneath handle with three narrow white bands above and two below. Another red band on lower body with two narrow white bands above and below. Perhaps similar bands inside rim.

FRAGMENTS

Rims

C48. Pl. 28. D. 0.016(?). Radiating white strokes in groups on top of rim; outside of rim from lip

downwards has a narrow white band, a horizontal white zigzag, and a red band flanked with pairs of narrow white bands; red band flanked with pairs of narrow white bands on lower body.

C49. Pl. 28. Similar to preceding, probably from the same vessel.

C50. Pl. 28. Red band beneath handle zone flanked by narrow white bands.

OTHER TYPES

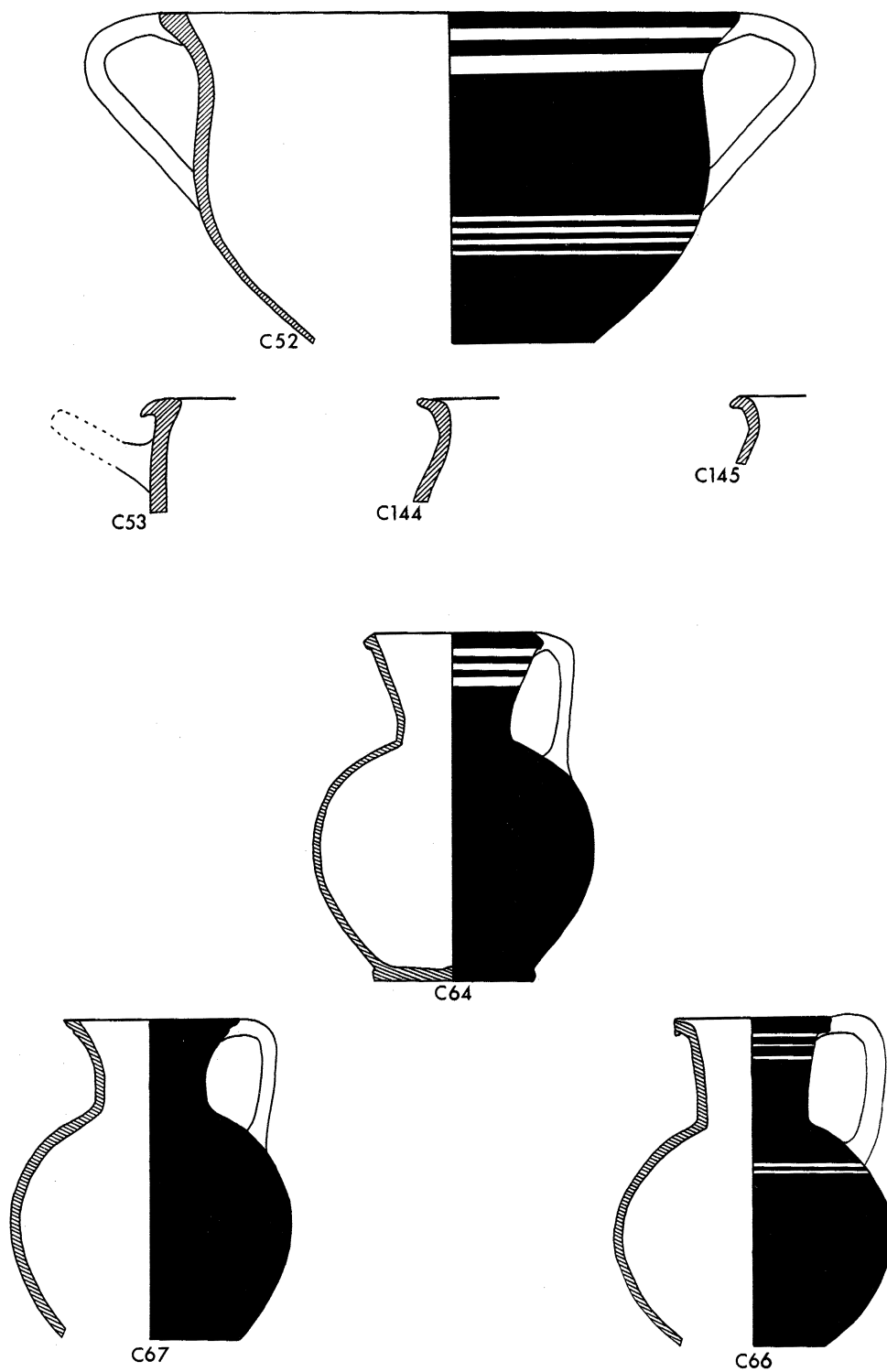
C51 (AP.38). Pl. 28. Mended and partly restored. H. 0.115, D. 0.164. Deep bowl with low ring foot and a pair of vertical handles, oval in section. Covered with black glaze except beneath foot. Although similar in profile to a kantharos from Olympia (Gauer, 1975, pl. 35:1, fig. 22:1; from a well dated [p. 243] to the third quarter of the 6th century B.C.), **C51** is about twice as large.

C52 (AP.125). Ill. 8, Pl. 28. Missing one handle and foot. H. pres. 0.12, D. est. 0.21. Deep bowl with flaring rim; two vertical handles, oval in section. Covered with black glaze except for two reserved bands on outside of lip and three beneath handle. Although somewhat similar in profile to kantharoi from Olympia (Gauer, 1975, pl. 35:2, fig. 22:3 and 4; dated [p. 172] to the second half of the 6th century B.C.), our bowl is considerably larger. The decoration of **C52** recalls that of kantharoi of the first half of the 7th century B.C. (e.g. Gauer, 1975, pl. 33:3 and 4).

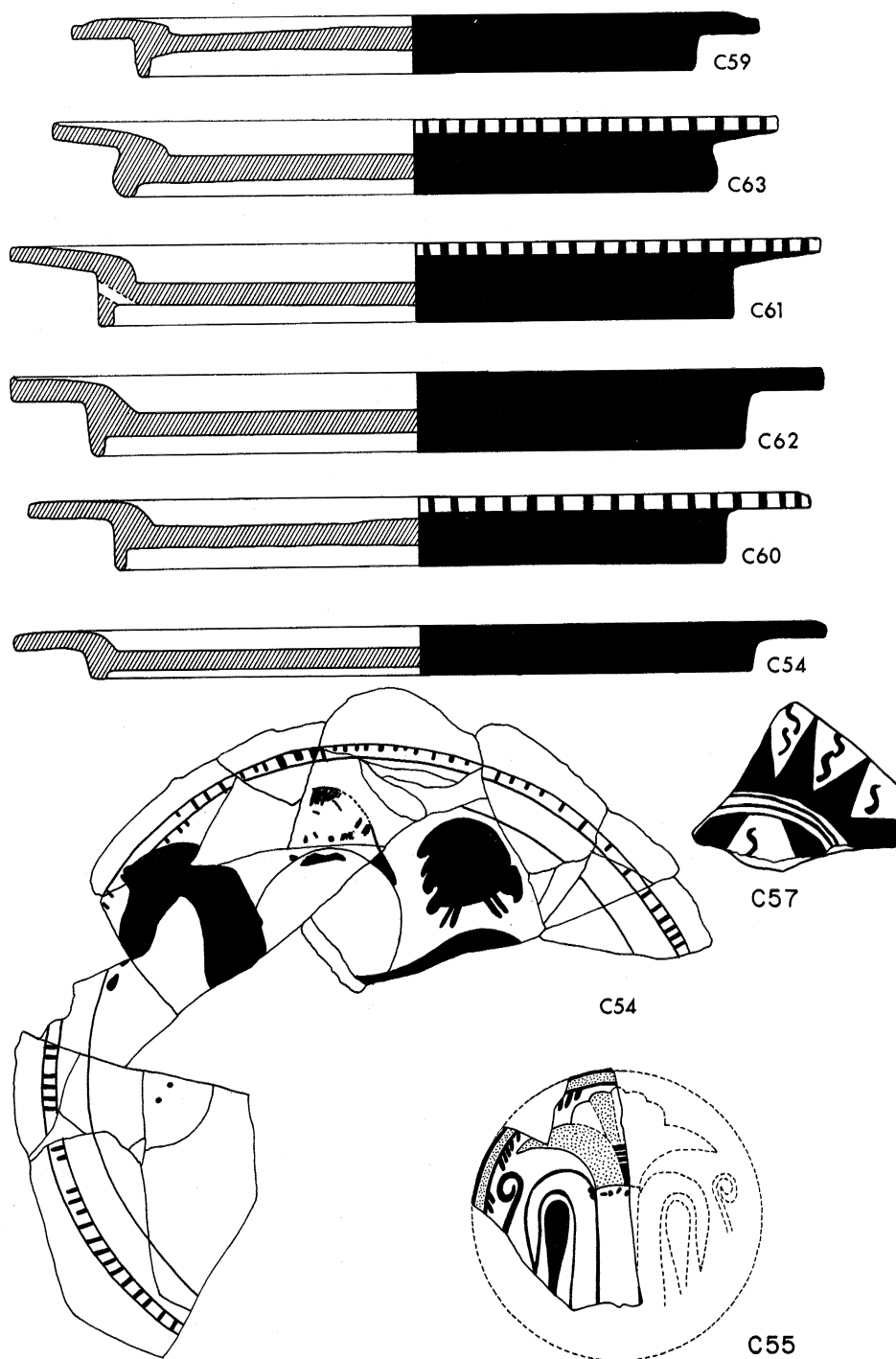
C53. Ill. 8. Fragment of rim. D. est. 0.21. Deep bowl with strongly everted rim, flat on top. Round horizontal handle beneath rim. Narrow glazed bands on outside; a narrow reserved band on top of the rim. A bowl from Olympia (Gauer, 1975, pl. 25:1, fig. 10:16; from a well dated [p. 243] to the first quarter of the 6th century B.C.) is somewhat similar but has a less strongly everted lip.

PLATES

All have broad, flaring rims and ring feet. They are fairly closely related in shape to plates of



ILL. 8. Archaic pottery: miscellaneous fine ware. Scale C52, C53, C144, C145 2:5; C64, C66, C67 1:5



ILL. 9. Archaic pottery: fine-ware plates. Red paint indicated by stippling. Scale 2:5

Early and Middle Corinthian (cf. Callipolitis-Feytmans, 1962, figs. 13–19; Boardman and Hayes, 1966, p. 24 and nos. 294–296), but the Elean version has a more nearly horizontal rim. A plate from Tocra which is virtually identical in profile with **C54** (Boardman and Hayes, 1966, no. 1020) was classified as Laconian, but in the light of our finds it might better be considered Elean (see Commentary, p. 64 below); Hayes considers that “it must surely date from around 600, if not earlier” (*ibid.*, p. 90).

Although this shape was apparently common during the Archaic period at Olympia (Eilmann, 1941, pp. 39, 40; Gauer, 1975, p. 163), only one profile has been published. Gauer (*loc. cit.*) evidently regards the shape as Late Archaic, but it is clear from the other comparisons that our examples must be earlier. There are close post-Archaic versions at Olympia (e.g. Eilmann, 1941, figs. 26, 27b).

DECORATED WITH DARK-ON-LIGHT PATTERNS

C54 (AP.93). Ill. 9, Pl. 29. About one-half preserved; mended; two non-joining fragments. H. 0.16, D. 0.28. Decoration worn and partly illegible. Rim: probably glazed on the top and the bottom. Upper center: long-haired and possibly bearded horseman carrying shield; small four-legged animal (hedgehog?) above the horse's rump. The horse and the small animal in silhouette; the shield in outline; the rider's head probably in a combination of silhouette and outline. A diagonal line behind the rider's head is probably part of a spear. The horse's head, and probably its foot, partly overlap the border. There was probably red and white embellishment, particularly on the small animal. Border pattern comprises, from inside to outside, a ring of glaze, overpainted with a red band flanked by narrow white bands, and two narrow glazed rings with closely spaced radiating strokes joining them. Bottom: star of five evenly spaced, narrow rays (parts of only three preserved) radiating from the missing center (which may originally have had rings; cf. **C57**); broad, glazed ring overpainted with narrower red ring flanked with

narrow white rings; glazed strokes on reserved resting surface.

Riders with spears but not shields sometimes occur in the tondi of Laconian kylikes (Lane, 1933–1934, pp. 159–160) in black-figure technique; they are surrounded by birds and small winged figures. Isolated riders with shield and spear also occur in Protoattic (e.g. Eilmann and Gebauer, 1938, pl. 42:4), and such riders are common in processions in Corinthian black figure (e.g. Payne, 1931, fig. 19:A). We have found no parallel for the curious four-legged animal.

A plate from Tocra with a similar star (Boardman and Hayes, 1966, no. 1020), although classified as Laconian, probably should be considered Elean (see general remarks above). There are parallels in Corinthian for the star of rays: e.g. Callipolitis-Feytmans, 1962, fig. 1 (Middle Protocorinthian); Boardman and Hayes, 1966, nos. 294–296, unless these are Elean (they are catalogued as Early Corinthian).

C55 (AP.61). Ill. 9, Pl. 29. Fragment from center; mended. L. pres. 0.143, W. pres. 0.123, D. foot est. 0.22. Top(?): white circle in center surrounded by a broad ring of brown glaze on which is a band of red edged with narrow rings of white; reserved ring with four S scrolls alternating with lozenges in dark brown glaze; white dots around edge of lozenges and a single dot at center; band of glaze on which a band of red is edged with narrow bands of white. Bottom: reserved center with lotus flower; petals in brown glaze, overpainted alternately with red and white; brown dots immediately beneath flower, tendrils and petallike forms, symmetrically arranged, beneath and on either side of flower; ring of brown glaze at outer edge of reserved area on which is a red band edged with narrow white bands; short, diagonal strokes of glaze just inside ring where space permits.

The alternation of motifs on the top resembles that on the bowls **C26–C46**: for the S scrolls, cf. **C27** and **C46**; for the lozenges, cf. **C26**. Cf. also a Middle Protocorinthian plate with lozenges (or squares) alternating with rays of a star (Callipolitis-Feytmans, 1962, fig. 1). The floral design on the bottom is related to that on the krater **C1**. Floral designs occur on Early and Middle Corinthian plates (e.g. Dunbabin,

1962, nos. 1969–1973), but the patterns are more crowded and complex, with four lotus flowers.

C56 (AP.147). Pl. 29. Fragment of rim and foot. Profile like **C54** (Ill. 9). D. rim 0.28. Upper surface of rim: narrow rings, a band of oblique strokes and a band of dots, all in black glaze. Upper center: widely spaced, solid triangles adjacent to rim; then at least three narrow bands. Outer edge of rim: glazed strokes. Lower surface of rim: running hooklike scrolls flanked by two narrow bands on either side. Narrow bands on foot and toward center of plate. Probably glazed strokes on resting surface. **C58** is perhaps from the same plate.

C57. Ill. 9, Pl. 29. Fragment from near center. Pattern of rays, interlocking S's and pothook spirals on one side as in Illustration 9 (cf. **C155**); other side mostly illegible. The alternation of rays with curvilinear motifs sometimes occurs at the base of Protocorinthian aryballoi (e.g. Johansen, 1923, pl. 21:3; 23:1; 28:2) and on the shoulder of a Corinthian "Subgeometric" oinochoe (Robertson, 1948, no. 159).

C58. Pl. 29. Fragment from near center. Narrow rings and a band of rays on one side; solidly glazed center and narrow rings on the other. Perhaps the same plate as **C56**.

BLACK GLAZED

C59 (AP.63). Ill. 9, Pl. 29. Coleman, 1968, fig. 6. About one-half preserved; mended. H. 0.022, D. 0.235. Pierced with a hole (D. 0.014) near foot. Completely coated with glaze except resting surface. Similar decoration on both sides: white circle at middle; rings of red flanked with narrow white rings near middle, near junction of center and rim, and on rim.

C60 (AP.109). Ill. 9, Pl. 29. About one-quarter preserved; mended. D. rim. 0.26. Decoration similar to preceding. Glazed strokes on reserved outer edge of rim and on resting surface.

C61 (AP.117). Ill. 9. D. rim 0.28. Two holes through foot 0.03 apart. Decoration apparently similar to **C60**.

C62. Ill. 9. D. rim 0.28. Decoration roughly similar to **C59**.

C63. Ill. 9. D. rim 0.25. Decoration like **C60**.

ROUND-MOUTHED JUGS

Although this is the most frequent shape in the well, most of the vessels appear to be fragmentary; after mending, only eight were complete enough to warrant inclusion in the catalogue. As in the case of Geometric jugs of similar shape, it is possible that some of the fragments classified here are in reality from hydriai; however, the one sure hydria, **C72**, has its handle attached at the middle of the neck, rather than at the rim, and horizontal handles from closed vessels are notably scarce in the Archaic deposit.

The bodies are for the most part nearly globular; one example (**C71**) with a squatter body than usual had been bound with a string before firing, probably because it was in danger of collapse. The angle between neck and body is usually fairly sharp but can be somewhat rounded. The neck flares toward the top. The rim is further everted and is often thickened to make a flat outer surface. Handles are usually oval but sometimes round in section. Most vessels were completely covered with black glaze except for two or three narrow reserved bands on neck or shoulder, or both; a few (e.g. **C87**) did not even have this rudimentary decoration. The underside of the foot was usually left unglazed but in one case, **C64**, has a painted circle and ring.

The shape is clearly descended from similar vessels of the Geometric period (cf. above, **B21–B26**). There is less range in the shape of the body in the Archaic deposit, however, and the globular Geometric variety (e.g. **B24**) is a prototype for all the Archaic examples. There is a similar range in the treatment of the rim in both periods.

Wells at Olympia have produced many similar jugs (Gauer, 1975, pp. 84–102); most of them date to the 6th and 5th centuries, but a few go back to the 7th century B.C. The shape of the belly varies considerably, and the closest comparisons to ours in this respect come from “*eine lange Reihe von kugeligen und bauchigen Kannen*” extending “*von der 1. Hälfte des 6. bis ins mittlere 4. Jahrhundert*” (*ibid.*, p. 96). Gauer subdivides this series and other series of jugs according to the form of neck and rim; for detailed comparisons, see the catalogue entries below. It is noteworthy that almost all the round-mouthed jugs from Olympia dating to the 7th and 6th centuries B.C. are covered from lip to foot with glaze. The only significant exceptions are a small group with painted decorations dating to the 8th to 7th century B.C. (*ibid.*, pp. 84–89) and a few examples from the late 6th and the early 5th centuries B.C. with painted bands on a reserved surface (e.g. *ibid.*, pl. 7:5 and 6). The absence of narrow reserved bands on the pottery from the Olympia wells and their presence on the pottery from our Geometric well (e.g. **B21**, **B25**, **B26**) suggest that this may have been an early feature which went out of use before the 6th century B.C.

C64 (AP.115). Ill. 8, Pl. 30. About two-thirds complete; mended and restored. H. 0.26, D. rim 0.13. Raised base, slightly hollowed; rim thickened on the outside to make two sloping surfaces; handle oval in section. Reserved bands, sloppily executed: two or three on upper neck, one perhaps at level of handle, one at juncture of body and base. Underside of base reserved, with glazed circle at center and ring near edge. A somewhat similar jug from Olympia (Gauer, 1975, pl. 4:3 = fig. 4:7) is dated to the late Archaic period (*ibid.*, p. 96). **C64**, which has a more flaring neck, is presumably earlier, to judge by the reserved bands (see general discussion above). For the rim, cf. also *ibid.*, pl. 2:6 = fig. 3:14 and pl. 4:4 = fig. 4:8.

C65 (AP.114). Pl. 30. Fragment lacking base and

much of body; mended. H. pres. 0.25, D. rim 0.11. Everted rim with flat, vertical outer surface making rounded transition to neck; handle oval in section. Reserved bands, sloppily executed: two on upper neck, two on upper body. Very similar to **C66**. A jug with similar neck and rim from Olympia (Gauer, 1975, pl. 1:5 = fig. 2:1) has painted decoration and is dated to the later 7th century B.C. (*ibid.*, p. 86); similar everted rims continue till the end of the Archaic period (*loc. cit.*).

C66 (AP.67). Ill. 8, Pl. 30. Fragment lacking base and much of body; mended and partly restored. H. pres. 0.24, D. rim 0.118. Everted rim with vertical, slightly concave outer surface, sharply undercut; handle round in section. Reserved bands, sloppily painted: three on neck, two on shoulder. Like **C65**, except for the undercut rim.

C67 (AP.45). Ill. 8, Pl. 30. Coleman, 1968, fig. 1. Fragment lacking base, lower body, and part of lip; mended and partly restored. H. pres. 0.23, D. rim 0.126. Flaring rim, slightly thickened, with a shallow horizontal groove on the outside; handle oval in section. Outside completely covered with fine, metallic black glaze. Similar to a series of jugs from Olympia “*mit kalathosförmig ausladenden Hälsen und glatter Mündung*” (Gauer, 1975, p. 91) which extends from the late 7th to the 5th century B.C.; for the profile of the rim, cf. also *ibid.*, fig. 4:9.

C68 (AP.131). Pl. 30. Fragment lacking neck and handle. H. pres. 0.19, D. foot 0.11. Low ring foot. Two reserved bands on body, one at juncture of body and foot.

C69 (AP.46). Pl. 30. Fragment lacking neck. H. pres. 0.163, D. 0.195, D. foot 0.11. Low ring foot; handle round in section. Three reserved bands beneath handle and one at juncture of body and foot.

C70 (AP.132). Pl. 30. Fragment similar to preceding but without reserved bands. H. pres. 0.21, D. foot 0.10.

C71 (AP.129). Pl. 30. Fragment lacking neck and handle. H. pres. 0.17, D. foot 0.115. Low ring foot; sagging, globular body. Marks of string around body made before firing, probably to prevent collapse. For the sagging form cf. **B26**.

HYDRIA

C72 (AP.126). Pl. 30. About one-half preserved; mended and restored. H. 0.275, D. rim 0.14. Low ring foot; globular body; flaring neck; everted lip, rounded on the top and undercut at an angle on the outside; vertical handle from shoulder to middle of neck; horizontal handles, now missing, at midpoint of body. Outside covered with glaze except beneath foot and reserved zone at level of handles, which contains a running zigzag.

Very similar in fabric and technique to the krater **C7** and possibly made by the same potter. The shape of the body is similar to that of the round-mouthed jugs **C64–C71**, although the neck is set off from the body by a more pronounced angle than is the case with most jugs. Hydriai are rare in the Olympia wells; the earliest example, which dates no later than the mid-6th century (Gauer, 1975, fig. 6:1; cf. p. 118), is very similar to **C72** in the shape of the body and neck but differs in having the vertical handle attached at the rim. There are no parallels at Olympia for the reserved zone with zigzag.

AMPHORA

C73 (AP.92). Pl. 25. Fragment of neck; mended. D. rim 0.158, H. pres. 0.11. Collar neck with a low, rounded horizontal ridge at junction with body; tall flaring lip with horizontal ridge just above junction with neck. Handles, oval in section, attach to neck beneath lip.

For the plastic ridges, cf. **C74**. A fragmentary amphora from Olympia (Gauer, 1975, fig. 6:6 and p. 133) has similar ridges but differs in that the lip is lower and joins the neck in a continuous curve. Gauer (*loc. cit.*) dates it “*noch im 6. Jahrhundert*” (it was found in a well dated to the first quarter of the 5th century B.C.; *ibid.*, p. 243). **C73** is presumably somewhat earlier. Similar ridges are also common on “Laconian” amphorae and jugs dating to the second and third quarters of the 6th century B.C. (Boardman and Hayes, 1966, nos. 951–959 and p. 88); these amphorae have a nearly cylindrical neck and lack the high, offset lip of **C73**.

OINOCHOAI

All are squat, fairly small jugs with trefoil spouts. The one more or less complete example, **C74**, has a ring foot, but some of the fragments probably from oinochoai have raised bases (e.g. **C82**, **C83**). All are black glazed, and the sole embellishments (in addition to the plastic ridge on **C74**) are white painted eyes on the mouths and red and white horizontal bands.

A group of oinochoai from wells at Olympia is clearly similar (Gauer, 1975, p. 103 and pl. 11:1–4; “*hocharchaisch*”), and white painted eyes also occur there (*ibid.*, pl. 1:2 = fig. 1:1, for which see p. 86; pl. 13:3, for which see p. 110; possibly pl. 10:1, for which see p. 103). Similar oinochoai are also found in Corinth starting as early as the late 8th century B.C.: e.g., Williams, 1981, nos. 43 and 44, the latter of which has white painted, vertically oriented eyes.

C74 (AP.41). Pl. 31. Some fragments missing, including mouth opposite handle; mended and restored. H. 0.125, D. 0.11. Low ring foot with narrow standing surface; trefoil mouth set off from body by horizontal ridge; high-swung handle, oval in section. Band of red, flanked by narrow white bands, just below handle; band of white on lower body. If there were eyes on the mouth, no trace survives.

For the plastic ridge at junction of neck and shoulder, cf. **C73**. An oinochoe from Olympia dated before the middle of the 6th century is closely similar except for the lack of such a ridge (Gauer, 1975, pl. 11:1; cf. p. 103). Two other similarly dated oinochoai from Olympia have ridges, but they are placed higher, where mouth joins neck (*ibid.*, pl. 10:1 and 2). For similar ridges on “Laconian Black-glazed” amphorae and jugs both at the base of and higher on the neck see Boardman and Hayes, 1966, nos. 951–959 and p. 88.

C75 (AP.110). Pl. 31. Upper part only; mended. H. pres. 0.14, D. 0.14. Similar to **C74**, but without ridge at base of neck. White painted eyes with “eyebrows” (i.e., a line above the eye and following its

contour; cf. **C76–C78**) on mouth. Bands on body like those on **C74**. For the eyes cf. the general discussion of oinochoai above.

C76. (AP.128). Pl. 31. Upper body only; lacking handle. H. pres. 0.125, D. 0.16. Similar to **C75**, with the addition of a narrow white band at junction of mouth and body.

C77 (AP.146). Pl. 31. Upper body similar to **C75** but with red band on body flanked with pairs of narrow white bands.

C78 (AP.130). Pl. 31. Mouth with white painted eyes and “eyebrows”.

C79 (AP.127). Pl. 31. Coleman, 1968, fig. 5, lower left. Upper body. Eyes without “eyebrows” on mouth.

C80 (AP.66). Pl. 31. Upper body. Red bands flanked with narrow white bands just below mouth and just below handle; two narrow white bands on lower body.

C81 (AP.145). Pl. 31. Upper body. White eye without “eyebrow” on mouth; narrow white band at base of neck; red band flanked with narrow white bands below handle.

C82. Pl. 31. Lower body probably of an oinochoe with raised base. Three narrow white bands on lower body; red band flanked by pairs of narrow white bands on shoulder.

C83. Pl. 31. Lower body probably of an oinochoe with low raised base.

TALL-NECKED JUGLET

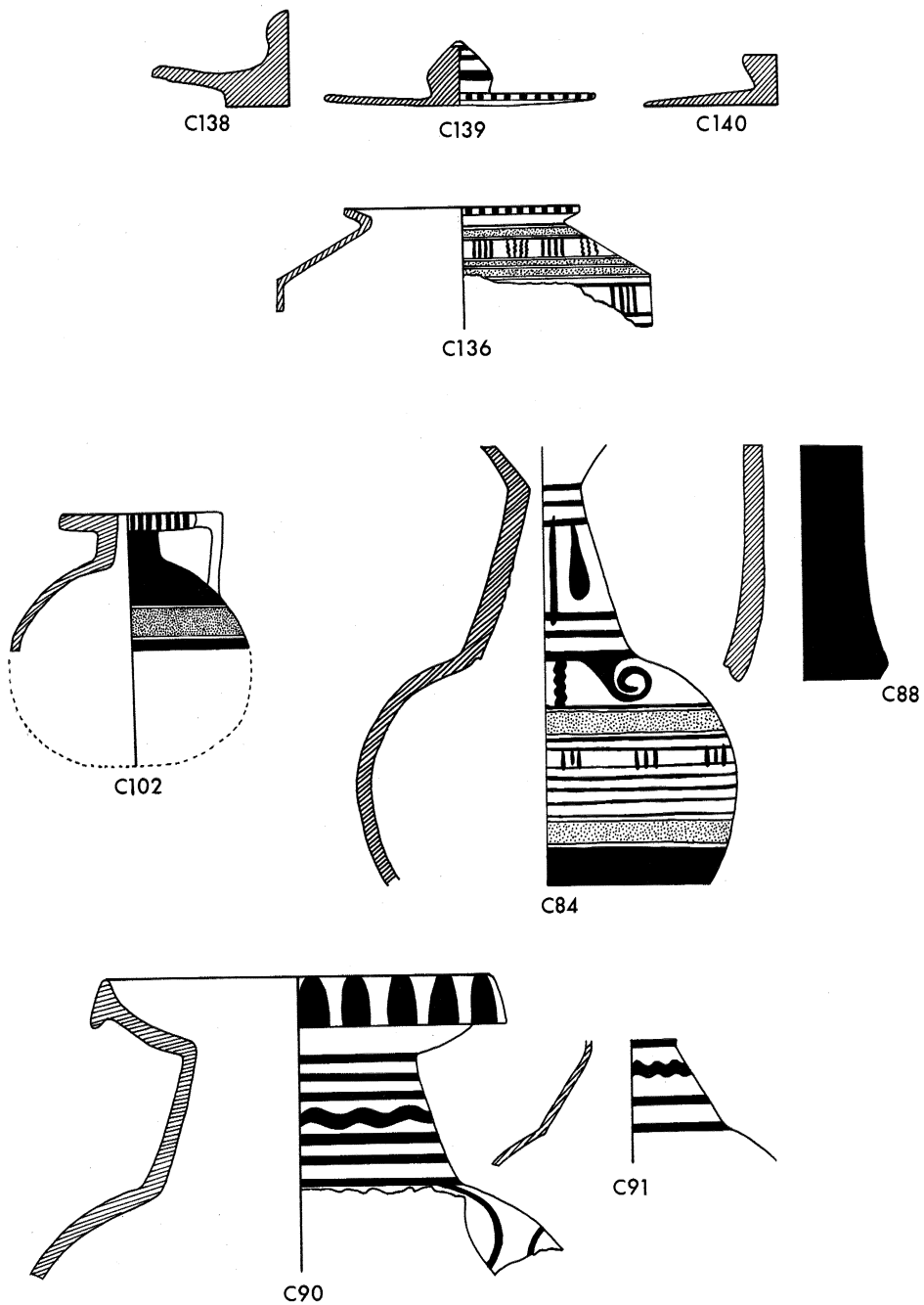
This category comprises small jugs with tall, narrow, conical necks and globular bodies (Gauer [1975, p. 110] calls the type “*Giraffenhalskännchen*”). Only one example is complete enough to be catalogued here, but fragments catalogued below of conical necks (**C85–C89**), a spreading foot (**C101**), and globular bodies (**C178–180**) may well all be from vessels of this shape.

The shape has a long history; it probably

derives ultimately from Corinthian Geometric and Protocorinthian globular oinochoai (e.g. Robertson, 1948, nos. 166, 171), and an ovoid, local variety continues at Ithaka (Robertson, 1948, nos. 499–520; Benton, 1953, nos. 993–1011) after the shape had been superseded at Corinth by the oinochoe with conical body. For a possible late Geometric forerunner from our site, see **B45** above. The small series of examples from Olympia probably extends roughly from the middle of the 7th to the middle of the 6th century B.C. (Gauer, 1975, pp. 110–112), with later offshoots which are clearly recognizable by their shorter necks. The Olympia jugs have flaring, conical feet; probably ours did also (cf. **C102** below).

C84 (AP.82). Ill. 10, Pl. 34. Coleman, 1968, fig. 5, upper, center, and right. Fragment of upper body and neck; mended and partly restored. H. pres. 0.15, D. 0.13. Globular body; conical neck; trefoil spout partly preserved. Decoration in black, red, and white on clay ground. Neck: three glazed bands at top and bottom; the space between is divided by vertical glazed lines into four panels, each containing an elongated droplet shape. Shoulder zone: divided by glazed, wavy vertical lines into panels, each containing a pothook spiral. Body: broad bands of glaze at top and bottom on which are red bands; narrow bands of white above the upper red band and below the lower one; one of the reserved rings on the belly contains groups of three vertical glazed strokes.

For the shape of the neck and the scheme of the decoration, cf. Gauer, 1975, pl. 13:3; for the shape, cf. *ibid.*, pl. 13:4. A similar scheme of decorated panels on the shoulder is also found on other shapes at Olympia (e.g. *ibid.*, pl. 1:5 and 6, a round-mouthed jug and an amphora, respectively); cf. also **C90–C97** below. For the pothook spirals, cf. **C30** and an amphoriskos of about 700 B.C. from Olympia (Hampe and Jantzen, 1937, pl. 4, above; cf. p. 46). Pothook spirals are common on the shoulders of Protocorinthian vases; cf. especially broad-based jugs, on which they alternate with vertical zigzag or rays (e.g.



ILL. 10. Archaic pottery: fine-ware jugs, aryballos, and pyxides. Red paint indicated by stippling. Scale 2:5

Johansen, 1923, pl. 19:3; Robertson, 1948, no. 159; Dunbabin, 1962, no. 117).

FRAGMENTS OF JUGS AND SPOUTS

This category comprises fragments of various pouring vessels of uncertain over-all shape: narrow conical necks (**C85–C89**) which could well belong to juglets like **C84**; a broad conical neck (**C90**); intermediate or indeterminate conical necks (**C91–C97**); flaring spouts (**C98–C100**) perhaps from oil jugs (cf. Gauer, 1975, pl. 12:2); and what appears to be a flaring base (**C101**).

Narrow, conical necks

C85. Pl. 34. Glazed rings and zone of sloppy vertical sigmas.

C86. Pl. 34. Glazed rings and vertical strokes.

C87. Pl. 34. From shoulder. Reserved zone preserving traces of glazed pattern.

C88. Ill. 10, Pl. 34. From larger vessel than preceding. Black glaze inside and outside; traces of vertical lines, originally in white, now appear dark because the paint underneath was protected.

C89. Pl. 34. Part of trefoil mouth. Black glazed with vertical and three horizontal white lines, the latter discontinuous, probably where inaccessible beneath handle (but cf. Gauer, 1975, pl. 13:3).

Broad, conical neck

C90 (AP.135). Ill. 10, Pl. 34. Fragment. H. pres. 0.103, D. rim 0.13. Broad, flaring offset rim, concave above; broad, nearly vertical, overhanging lip. Broad, vertical glaze strokes narrowing toward the top (leaves?) on outside of lip; horizontal bands framing a zone of broad wavy line on neck; glazed lines on shoulder, possibly from horizontal S's and crescents. For the lip, cf. **C99**; for the pattern on the neck, cf. **C91–C93**. The shape is unparalleled at Olympia; for decoration on both neck and shoulder, however, cf. an amphora from Olympia (Gauer, 1975, pl. 1:6).

Intermediate or indeterminate, conical necks

C91. Ill. 10, Pl. 34. Horizontal bands and zigzag on neck; vertical zigzag alternating with another motif, probably pendent rays, on shoulder.

C92. Pl. 34. Similar to preceding. Motifs on shoulder include four vertical lines.

C93. Pl. 34. Similar to preceding two, probably with pendent rays on shoulder.

C94. Pl. 34. Shoulder with nearly vertical lines and multiple sigmas.

C95. Pl. 34. Shoulder with vertical lines and dot.

C96. Pl. 34. Shoulder with broad sigma.

C97. Pl. 34. Shoulder with two vertical lines and curvilinear motif.

Flaring mouths

C98. Pl. 34. Shallow, somewhat concave above; vertical strap handle from edge of rim. Covered with black glaze.

C99. Pl. 34. Shallow with broad lip, sloping toward outside (cf. **C90**). Parallel glazed lines on upper surface, continuing on lip.

C100. Pl. 34. Smaller and deeper than preceding examples. Glazed strokes on the top of lip; horizontal glazed bands on outside.

Flaring base(?)

C101. Pl. 34. Broad, flaring fragment, carelessly finished and unglazed; probably from a tall-necked juglet (cf. **C84** and Gauer, 1975, pl. 13, nos. 4–6).

ARYBALLOI

C102 (AP.81). Ill. 10, Pl. 35 (two views). Upper half; mended. H. pres. 0.044, D. rim 0.048. Globular body; ribbon handle. Covered with black glaze. Broad red ring edged by narrow white bands occupying most of upper surface of rim; vertical white strokes on edge of rim; red band edged with narrow white bands below handle; three horizontal white strokes on back of handle.

Of a type often called "Laconian" but clearly of local manufacture; the type is common in local fabric at Olympia, where it dates to the first half of the 6th century B.C. (e.g. Kunze, 1961, fig. 61, found in a well with two Middle Corinthian vases; Schiering, 1964, p. 159, no. 5; Gauer, 1975, p. 115 and pl. 16:7). For discussion of other examples and for dating, see Dunbabin, 1962, pp. 382–384, nos. 4105–4112.

C103 (AP.122). Pl. 35. Fragment of upper body; lacking neck, rim, and handle. H. pres. 0.035. Reserved zone on shoulder: running spirals in black glaze, perhaps originally embellished with white dots. Traces of red and white bands on glazed surface beneath reserved zone.

Cf. **C182**, which may be from a similar aryballos. An aryballos from Olympia "*wohl aus Laconien importierter*," with a similar zone containing a simple pattern of petals, was found in a well filled in the third quarter of the 6th century B.C. (Gauer, 1975, pl. 15:2 and p. 115; for the date, see p. 243). **C103** was more likely inspired by Corinth.

KANTHAROI

There are three types. The first, a broad, shallow vessel with low ring foot (**C104–C107**), is clearly descended from similar Geometric vessels (above, **B23–B30**). The second type (**C108–C109**) is also broad but deeper and with more upright sides; it, too, has Geometric ancestors (above, **B31**, and comparisons there cited) and is paralleled at Olympia (Gauer, 1975, pp. 164–169: "*Becher mit Vertikalhenkeln, Frühform*"). The third type (**C110–C128**), a tall vessel with a conical foot, has a fairly wide distribution in the Peloponnese and the West Greek area and is also well represented at Olympia (*ibid.* pp. 169–172: "*Becher mit Vertikalhenkeln, Spätform*"). The third type is by far the most common in our deposit; the first is represented by only a few examples and the second only by the two examples catalogued here.

BROAD, SHALLOW

This shape, which has a good Geometric ancestry (see above), is almost completely absent at Olympia in the 7th and 6th centuries B.C., during which time it was apparently superseded by cups of similar shape but with horizontal handles (Gauer, 1975, pl. 37:1–3). Our three examples find their closest parallels among such cups (e.g. **C129–C131**).

C104 (AP.39). Ill. 11, Pl. 33. Mended and restored. H. 0.082. D. 0.122. Dark brown glaze, with metallic sheen in places, on all surfaces except beneath foot. A kantharos from Olympia is somewhat similar but has a lower lip and a flat bottom (Schiering, 1964, pl. 61, no. 6; described on p. 159 as "*Elisch. Um 600 v. Chr.*"). The profile of **C104** is closely matched by local cups (e.g. **C129–C131** below; Gauer, 1975, pl. 37:1–3).

C105. Pl. 33. Rim, shoulder, and ribbon handle. Outside of rim reserved, with two horizontal glazed bands; reserved band on inside of rim; otherwise black glazed. For the bands on the rim cf. those on kantharoi of the broad, deep type (e.g. **B31** above; Gauer, 1975, pls. 32:3, 33:3 and 4) and on cups (e.g. **C131**; *ibid.*, p. 181, pl. 37:5); a tall kantharos from Olympia (*ibid.*, pl. 34:2) has both bands and zigzag.

C106 (AP.149). Ill. 11, Pl. 32. Upper part with handle attachment. D. rim est. 0.12. Black glazed except for bands on outside and inside of rim. Cf. **C105**.

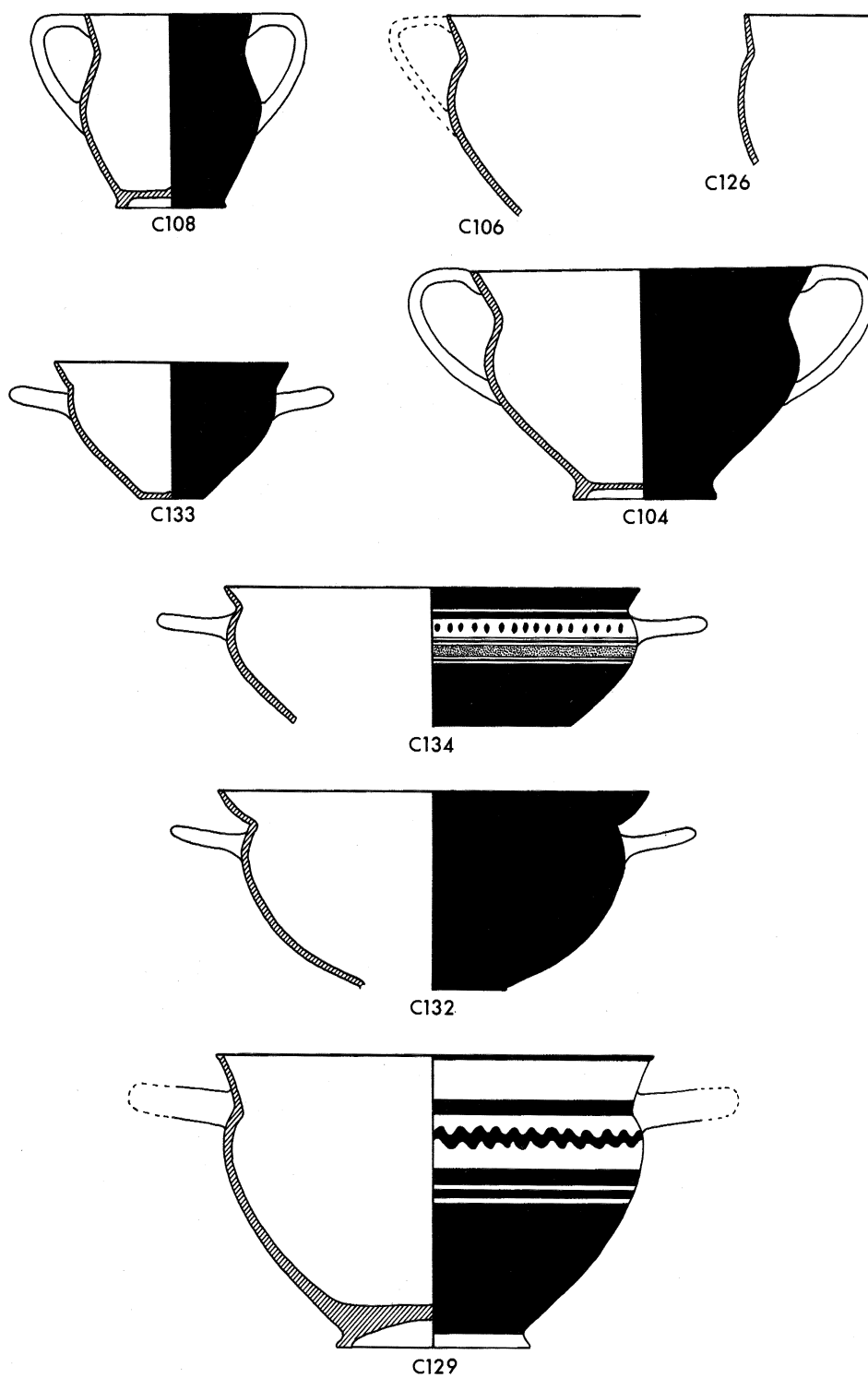
C107. Pl. 33. Coleman, 1968, fig. 5, lower middle. Similar to preceding two but with rim only partly preserved.

BROAD, DEEP

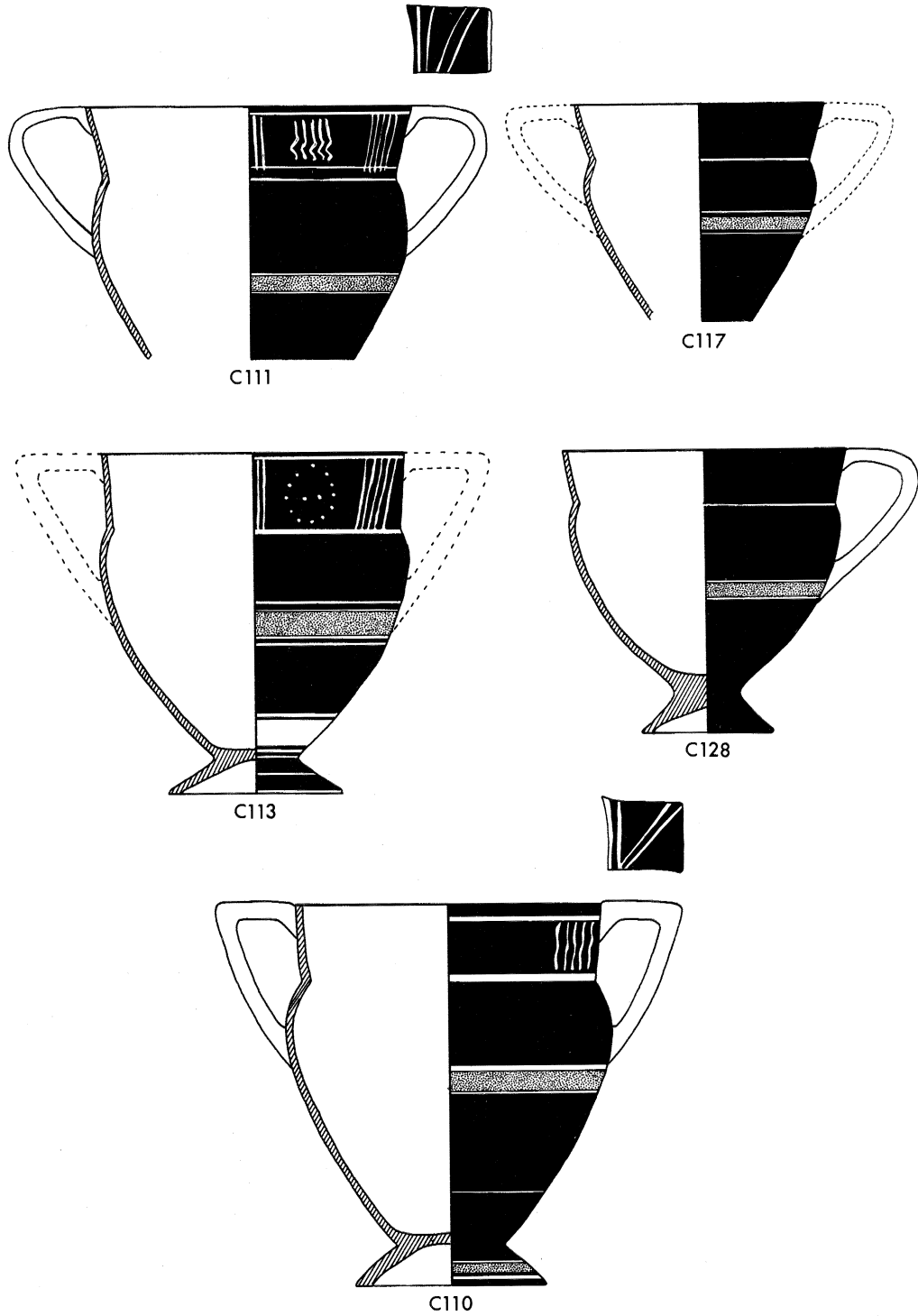
At Olympia, according to Gauer (1975, p. 165), this type (i.e. "*die Frühform*") "*dem 7. Jahrhundert und der geometrischen Zeit angehört*," with isolated examples going down to the 6th century B.C. (*ibid.*, p. 168). Our two examples are unusually broad and probably represent a late stage in the development.

C108 (AP.119). Ill. 11, Pl. 33. Mended and restored. H. 0.07, D. rim 0.06, D. base 0.037. Unusually small for this type of vessel. Dark brown glaze

II. THE FINDS



ILL. 11. Archaic pottery: fine-ware kantharoi and cups. Red paint indicated by stippling. Scale 2:5



ILL. 12. Archaic pottery: fine-ware kantharoi and teacup(?). Red paint indicated by stippling. Scale 2:5

with metallic sheen on all surfaces except beneath foot. Cf. Gauer, 1975, pl. 33:6, dated to the early 6th century B.C. (*ibid.*, p. 168).

C109 (AP.141). Pl. 32. Lower body and handle attachment; mended. H. pres. 0.062, D. base 0.05. Metallic brown glaze on all preserved surfaces except beneath foot. Tool marks on outside, probably not intended as decoration.

TALL

All but **C126** are completely covered with black glaze except beneath foot. The decoration mostly consists of red and white bands. About one half of the preserved examples also have simple white motifs in panels on the outside of the rim (e.g. **C110–C113**, **C118–C125**); there are usually two panels on each side, framed by groups of vertical lines.

At Olympia, according to Gauer (1975, p. 165), this type “*erstreckt sich von der 2. Hälfte des 7. bis über die Mitte des 6. Jahrhunderts.*” All our examples find their closest parallels later rather than earlier in the series (cf. *ibid.*, pp. 169–172), with the possible exception of **C126** (see below).

C110 (AP.44). Ill. 12, Pl. 32. About one-half preserved; mended and partly restored. H. 0.138, D. rim est. 0.11. Inside of rim: broad red band flanked by narrow white bands. Outside of rim: zone framed above and below by narrow white bands, divided into panels by groups of five white, somewhat wavy vertical lines; each panel presumably enclosed a motif, which has not survived. Handle: two diagonal white lines on the top enclosed by pairs of horizontal white lines. Body below handles and outside of foot: broad red bands flanked by narrow white bands.

For the profile, cf. Gauer, 1975, pl. 34:6, from the later part of the Olympia series; for an identical scheme of decoration, cf. *ibid.*, fig. 21:1, from the later but not the latest part of the series.

C111 (AP.112). Ill. 12, Pl. 32. Fragment of upper part; mended and partly restored. H. pres. 0.09, D. rim est. 0.12. Similar to preceding except that red band on inside of rim has two narrow white bands beneath it, and panels on the outside (two on each side) enclose five vertical zigzags, carelessly drawn. For the profile, cf. Gauer, 1975, fig. 21:1–6.

C112 (AP.134). Pl. 32. Fragment of upper part; mended. H. pres. 0.10, D. rim est. 0.12. Like **C110** and **C111**. Only one white band beneath red band on inside of lip; otherwise decoration like **C111**.

C113 (AP.138). Ill. 12, Pl. 32. About one-half preserved; lacking handles; mended and partly restored. H. 0.123, D. rim est. 0.12. Inside of rim: red band flanked by narrow white bands. Outside of rim: panels like those on **C110–C112**, enclosing a rosette (12 white dots on circumference and two in center). Center of body: red band with pairs of narrow white bands above and below. Lower body: broad white(?) band flanked by narrow white bands, one above and two below. Foot: narrow white bands at lower edge and near center (red band worn away?). For the rosette, cf. **C125**.

C114 (AP.79). Pl. 32. About one-third preserved; mended and partly restored. H. 0.09, D. rim est. 0.08. Bands of red, flanked with narrow bands of white on outside of rim, immediately below handles and on foot. Similar in profile to **C110** and **C113** but considerably smaller.

C115 (AP.140). Pl. 32. Preserved from foot to top of handle. H. 0.11. Profile similar to **C110** (Ill. 12). Red bands flanked with narrow white bands on inside of rim, below handles, and on foot.

C116 (AP.80). Pl. 32. Lacking foot. D. rim est. 0.09. Red bands flanked by narrow bands of white on inside of rim and below handles; a single white band on lower body.

C117 (AP.85). Ill. 12, Pl. 32. Upper part. D. rim 0.091. Similar to preceding. White bands on inside and outside at junction of rim and body.

C118–C121. Pl. 32. Multiple zigzags within panels on lip (cf. **C111**, **C112**).

C122, **C123**. Pl. 32. S-curved lines within panels on lip.

C124. Pl. 32. Lines resembling musical notes, depending from a horizontal stroke, in panels on lip.

C125. Pl. 32. Rosette (eight white dots on circumference and one in center; cf. **C113**) in comparatively narrow panel framed by 10 white vertical lines.

C126 (AP.148). Ill. 11, Pl. 32. Probably from a kantharos (neither handle preserved). Outside of lip reserved, with horizontal zigzag flanked by glazed bands; reserved zone on body with horizontal glazed bands; reserved band on inside of rim. Similar in shape and decoration to a kantharos from Olympia dated to the late 7th or early 6th century B.C. (Gauer, 1975, pl. 34:2 and p. 169).

C127 (AP.142). Pl. 33. Foot and lower body. Two glazed rings beneath foot; red band with two narrower white bands above and one below on outside of foot; broad reserved zone with single narrow glazed bands near top and bottom on lower body. An unusually fine piece; for the reserved zone, cf. **C126** and the parallel there cited.

TEACUP(?)

C128 (AP.40). Ill. 12, Pl. 33. About three-quarters complete; mended and restored. H. 0.103, D. rim 0.10. Identical in almost every way to the tall kantharoi (**C110–C127**) but apparently with a single handle. Completely covered with metallic brown glaze except under foot. Red bands, flanked with narrow white bands, on inside of rim and beneath lower attachment of handle; white bands at join of rim and shoulder; traces of other bands on lower body and foot (Illustration 12 shows a possible arrangement).

CUPS

Cups (i.e., with two horizontal handles) fall into two types. The first has a high, nearly upright rim and a ring foot (e.g. **C129–C131**). The second is more shallow and has a low, everted rim, often concave on the top (**C132–C135**).

Both types were apparently local specialties. The first was probably descended from Geometric prototypes (cf. **B33**, **B34** above). The second may ultimately have been of Laconian inspiration (cf. Gauer, 1975, pp. 182–184).

WITH HIGH, UPRIGHT RIM

C129 (AP.123). Ill. 11, Pl. 33. About two-thirds complete; mended and partly restored. H. 0.108, D. rim est. 0.18. Handle, round in section, at shoulder. Rim reserved, inside and outside, except upper surface. Reserved shoulder zone with horizontal zigzag, framed with glazed bands; another reserved zone beneath shoulder with two sloppily painted, glazed bands; foot reserved inside and outside. Very close in shape and decoration to two cups from Olympia (Gauer, 1975, pl. 37:2 and 3; dated, p. 181, to the 7th century B.C.).

C130, **C131**. Pl. 33. Probably from the same vessel. Similar to preceding but with glazed bands near midpoint of rim, both inside and outside.

WITH LOW, EVERTED RIM

The only example with the bottom preserved, **C133**, has a flat base; the others probably had flat or only slightly raised bases, to judge by examples from elsewhere. There are many similar cups from Olympia, and these have been subdivided by Gauer (1975, pp. 182–191) into several categories. Our examples cannot easily be assigned to one or another category: **C133** is unusually small, and the rest are fragmentary.

C132 (AP.144). Ill. 11, Pl. 33. Nearly complete except for base; mended and partly restored. H. pres. 0.072, D. rim 0.155. Handles round in section. Completely covered with dark brown glaze. The closest parallels from Olympia are Gauer, 1975, pl. 37:6 and 8 (both dated [p. 184] somewhat later than the beginning of the 6th century B.C.).

C133 (AP.69). Ill. 11, Pl. 33. One handle and part of body missing; mended and partly restored. H. 0.048, D. rim 0.083. Small, almost miniature. Flat bottom, slightly concave beneath; handles round in section. Completely covered with dark brown glaze except beneath bottom. A larger cup from Olympia which is close in shape is dated by Gauer well into the 7th century B.C. (1975, pl. 37:5; cf. pp. 181 and 218); ours is probably later.

C134 (AP.111). Ill. 11, Pl. 33. Coleman, 1968, fig. 5, upper left. Fragment of upper part. H. pres.

0.045, D. rim est. 0.15. Handles round in section. Covered with dark brown glaze except for reserved handle zone, which has closely set dots. Red band flanked by pairs of narrow white bands below handle. Narrow white bands at junction of body and lip, inside and outside. Unusually fine workmanship. The shape recalls the two preceding cups. At Olympia such reserved shoulder zones with rows of dots are usually found on a shape with a taller, more upright lip (e.g. Gauer, 1975, pls. 38:3 and 4, 39:1; all dating, p. 187, within the first three quarters of the 6th century B.C.).

C135. Pl. 33. Similar to **C134**.

PYXIS

There is only one certain example, and it is fragmentary (cf. **C167** and **C168**, which may also have been from pyxides).

C136 (AP.108). Ill. 10, Pl. 35. Fragment of upper part; mended. H. pres. 0.045, D. rim 0.08. Vertical sides making sharp angle with conical shoulder; everted lip, pierced with two pairs of holes. Closely spaced, vertical strokes on the outside of rim; glazed band immediately beneath junction of rim and shoulder on which is a red band flanked with narrow white bands; reserved zone on shoulder with closely spaced, alternating groups of four vertical straight and wavy lines; glazed band above and running slightly over junction of shoulder and body on which is a red band embellished with three narrow white bands; reserved zone on upper body, bordered by horizontal glazed band, in which a group of four vertical lines is preserved (alternation similar to shoulder zone?); another glazed band below this zone.

The fragment of a Geometric pyxis, **B48** above, is similar but has a vertical rather than an everted lip. **C136** can be connected with a small group of pyxides from Olympia dating to the late 7th and early 6th century B.C. (to those mentioned in Gauer, 1975, p. 151 should be added Schiering, 1964, p. 159, nos. 3 and 4). Although examples from Olympia appear to be thicker walled and heavier than **C136**, one is quite close in both shape and decoration (Hampe

and Jantzen, 1937, fig. 16; dated by Gauer, *loc. cit.*, "nicht lange vor der Mitte des 6. Jahrhunderts."). The decoration in the shoulder zone is also closely paralleled on a bowl from Olympia (Kunze, 1961, fig. 65) dating probably to the first half of the 6th century B.C. (*ibid.*, pp. 122–127; Gauer, *loc. cit.*); cf. also the rims of kantharoi with similar patterns in white on a black ground (e.g. **C111**, **C112**, **C118–C121**).

LIDS (PROBABLY FROM PYXIDES)

All have nearly horizontal rims and central knobs. All but **C138** are flat, or nearly flat, on the underside. No lids of this type have yet been published from Olympia. Similar lids, often with a flange on the underside, are common in Protocorinthian and Corinthian (e.g. Robertson, 1948, nos. 92–110; Dunbabin, 1962, pp. 183–185; Boardman and Hayes, 1966, nos. 211–219).

All our lids are decorated on the upper surface with reserved and painted rings, some in a polychrome technique (**C139**, **C141**, **C142**). In one case (**C139**), a reserved ring is embellished with dots.

C138 (AP.120). Ill. 10, Pl. 34. Missing about one half. H. 0.035, D. rim 0.09. Disk bottom; rim sloping upward; high domed knob. Bottom reserved. Top reserved except for rings of brown glaze at the edge and middle of rim and three rings around knob.

C139 (AP.116). Ill. 10, Pl. 34. Missing about one third; mended. H. 0.021, D. rim 0.092. Rim sloping upward; knob nearly biconical; pierced hole (one of a pair?) near edge of rim. Bottom reserved. Glazed strokes on edge of rim. Top: a broad ring of glaze at outer and inner side, on which is a red ring flanked with narrow white rings; reserved zone between with pairs of narrow glazed rings framing a ring of widely space dots. Three rings of glaze around knob.

C140 (AP.121). Ill. 10, Pl. 34. Missing about two thirds. H. 0.018, D. rim est. 0.10. Flat on bottom; knob broadening toward the top. Bottom reserved.

Glazed strokes on edge of rim; narrow and broad glazed bands on top of rim and knob.

C141. Pl. 34. Profile like **C140** (Ill. 10). Pairs of pierced holes near edge. On the top, rings of glaze-paint, red, and white.

C142. Pl. 34. Profile like **C140** (Ill. 10). Two non-joining fragments. Hole near edge. On the top, rings of glaze-paint, red, and white; the red and white colors are laid down directly on the clay surface.

OTHER SHERDS

This category comprises decorated or other significant fragments of vessels the over-all shape of which is uncertain. The decoration consists of glazed patterns on a reserved ground, except as noted. The sherds are oriented in the photographs with what appears most likely to be the uppermost side toward the top. Body sherds and bases with inner surfaces covered with glaze are taken, somewhat arbitrarily, to be from open shapes. The distinction between large and small is also somewhat arbitrary.

SMALL, OPEN(?) SHAPES OF UNUSUAL PROFILE

Rims

C143. Pl. 33. Round horizontal handle near plain rim. Traces of red and white bands over glazed surface, inside and outside.

C144. Ill. 8. Everted lip. Glazed inside; glazed band on outside.

C145. Ill. 8. Everted lip, D. est. 0.16. Glazed inside; glazed bands and part of glazed curvilinear shape outside.

LARGE, OPEN VESSELS, DECORATED OUTSIDE

Flat bottom

C146 (AP.143). Pl. 35:b. Rounded transition to side of vessel. Inside covered with black glaze; black glaze on bottom, on which are two concentric rings of red, the innermost flanked by one, the outermost by two narrow rings of white; one crescent springing from bottom, with white dots parallel to edges; two other

elongated shapes, the uppermost evidently a fish with fins and concentric white circles forming an eye and gill. For the fish, cf. **C147–C149**; no parallels have yet been published from Olympia, but the motif is known at Sparta (e.g. Lane, 1933–1934, pl. 25:e) and in Protocorinthian (Johansen, 1923, p. 56; Robertson, 1948, pl. 13, no. 171). For the crescent, cf. **C26, C27, C31**.

Body sherds

C147. Pl. 35:b. Elongated shape with projections on either side; probably a fish with fins spread (cf. the preceding).

C148, C149. Pl. 35:b. Similar shapes; traces of white embellishments.

C150. Pl. 35:b. Curving tendril(?) besides which is a spikelike shape swelling into a round eye near its point; the point of another spike(?) appears to the right. The eye resembles that of a bird on a tall-necked jug from Olympia (Gauer, 1975, pl. 13:3), but here it is apparently detached; for other birds, cf. **C15** and the parallels there cited.

C151. Pl. 35:b. Similar eye, probably also part of spikelike form, with a broad, curving line near by.

C152. Pl. 35:b. Leaves spreading from a central stalk, swelling toward the top (cf. **C163–C165**).

C153. Pl. 35:b. Glazed bands, beneath which is a group of three vertical S's; cf. **C122, C123** (in white on glaze).

C154. Pl. 35:b. Probably from lower body (or conical foot?). Closely spaced rays, with a narrow reserved band and a glazed area beneath. For the rays, cf. **C8** and possibly **C159**. If from conical foot, the decoration would correspond in position to that on **C8**.

C155. Pl. 35:b. Probably from shoulder. Closely spaced pendent rays, between which are vertical S's. For the decoration, cf. **C57** and parallels there cited.

SMALL, OPEN VESSELS, DECORATED OUTSIDE

Rims

C156. Pl. 35:a. Slightly thickened. Band on inside near lip; glazed strokes on the top; bands on outside framing a zone with angular motif.

C157. Pl. 35:a. Somewhat everted. D. 0.16. The top flat, with glazed zigzag; zone on outside with linked horizontal S's (cf. **C39**, **C40**, **C178**).

C158. Pl. 35:a. Plain. D. 0.08. Reserved inside with glazed band near lip, below which are two dots (drips?); zone with horizontal zigzag on outside, with glazed band beneath (cf. **C26–C46**, decorated bowls).

Bases

C159. Pl. 35:a. Ring foot. D. est. 0.12. Rays(?) with broad bases.

C160. Pl. 35:a. Broad, low ring foot. D. est. 0.06. Two narrow rings on bottom; two narrow bands near juncture of body and foot; short, vertical wavy lines alternating with another, illegible motif on lower body.

Body sherds

C161. Pl. 35:b. Glazed band toward bottom on which is a red band flanked with white. Above this, part of the body and foot of a bird, facing right; cf. **C15–C20** and the parallels there cited.

C162. Pl. 35:b. Glazed band like preceding at bottom; above, vertical zigzag.

C163. Pl. 35:b. Glazed band at bottom (on which is a red band flanked with white), from which springs a treelike form (cf. **C152** and Schiering, 1964, pl. 61:11).

C164. Pl. 35:b. Similar to preceding; curving shapes to left of "tree".

C165. Pl. 35:b. Floral design, embellished with white dots, beneath two glazed bands.

C166. Pl. 35:b. Narrow lines, part of an unidentified motif.

C167, C168. Pl. 35:b. From the same carinated vessel, possibly a pyxis (cf. **C136**) but glazed inside. Groups of four vertical lines on shoulder; narrow band at carination, with crosshatching beneath.

C169. Pl. 35:b. Perhaps from body of same vessel as preceding. Broad and narrow lines in angular pattern.

LARGE, CLOSED VESSELS WITH DECORATION

Necks with rims

C170. Pl. 35:a. Flat, offset lip; conical neck with reserved zone, flanked by pairs of narrow lines, containing an S motif; glazed area beneath.

C171. Pl. 35:a. Neck similar to preceding.

C172. Pl. 35:a. Offset rim; vertical neck. Vertical and horizontal lines.

C173. Pl. 35:a. Similar to preceding.

Body sherds

C174. Pl. 35:a. Shoulder with glazed circle or "sausage" (cf. **B1–B3** above); part of another motif to right.

C175. Pl. 35:a. Reserved shoulder zone (with bands above and below) in which is a curvilinear form and a pendent triangle in outline.

C176. Pl. 35:a. Narrow horizontal and vertical lines forming part of panel in which is a curvilinear motif in silhouette.

C177. Pl. 35:a. Similar to preceding but with wavy vertical lines.

SMALL, CLOSED VESSELS WITH DECORATION

Body sherds

C178. Pl. 35:a. Coleman, 1968, fig. 5, lower right. Probably from a tall-necked juglet like **C84**. Shoulder reserved, with traces of decoration probably divided vertically into panels. Broad band beneath; narrow bands on body interrupted near the top by a zone in which are horizontal linked S's. For the linked S's, cf. **C39**, **C40**, **C157**.

C179, C180. Pl. 35:a. Probably both from a single tall-necked juglet. Broad bands of glaze (on which are red bands flanked by narrow white bands) interspersed with narrow bands. The banding is twice interrupted by reserved zones, the lower of which contains widely spaced, short vertical lines ("drops"); the poorly preserved upper zone was divided by parallel lines (four to the right as preserved) into panels

containing a motif which comes to a point at the bottom (ray?).

C181. Pl. 35:a. Tendril on which are white dots (now visible as dark ones) at right; loop surrounding dot at left.

C182. Pl. 35:a. Perhaps from shoulder of aryballos (cf. **C103**). Floral pattern.

C183. Pl. 35:a. Horizontal(?) zigzags, fairly widely separated.

Black-figured Ware

C184 (AP.64). Pl. 35. Fragment of the body of a large closed vessel. H. pres. 0.081, W. pres. 0.123. Fairly soft, light gray-brown fabric; surface worn. Inside reserved. Outside: bird, evidently in flight, with long, curved beak, in black silhouette with incised eye and feathers; to right two slightly curving elongated shapes (legs of a horse?), outlined with incision; next to them two broad, vertical lines of glaze with nearly parallel edges and without incised detail; at upper left, a small area of glaze with an oblique edge, outlined with incision.

Birds in flight are common in Laconian Black Figure (cf. Lane, 1933/1934, p. 170 and pls. 45:b, 46:a, 48:a), but the feathers are not usually incised in the same manner as ours (but cf. *ibid.*, pl. 42:a, for cocks with somewhat similar feathers). Our piece is clearly a local Elean product. Cf. a fragment from Olympia "*eines zylindrischen Ölkännchens . . . das zu einer seltenen Gattung schwarzfigurig bemalter elischer Vasen gehört*" (Gauer, 1975, p. 112, pl. 15:4-6).

Coarse Ware

This amounted to about five tinfuls (out of a total of 23 tinfuls of pottery). The fabric varies considerably in coarseness. Most pieces are light in color, either buff or reddish. The small jugs or jars (e.g. **C185-C188**), which are coarser than average, have a spongy surface, and are sometimes dark brown or gray as if used over a fire, form a distinct group. All the coarse ware was apparently made by hand rather than on a wheel. Many pieces have a smooth, slipped surface.

The shapes, which are very fragmentary, include small jugs or jars (e.g. **C185-C188**); round covers, some with openings in the center (e.g. **C189**); bowls and basins of various sorts, some perhaps on stands (e.g. **C190, C191**); pithoi with long, rodlike, vertical handles, round in section; flat pans. Only a few of the best preserved and most interesting pieces are included in the catalogue.

In general, the coarse ware has a close similarity to that of the Geometric period (cf. **B53-B76**).

SMALL JUGS OR JARS

C185. Pl. 36. Fairly tall, slightly flaring rim, meeting body at angle; one vertical strap handle preserved from lip to shoulder. Probably one-handled (cf. **B53-B55** above).

C186. Pl. 36. Low, slightly flaring lip; handle similar to preceding.

C187. Pl. 36. Similar to preceding but with everted lip, flat on top.

C188. Pl. 36. Ring base, probably from a vessel of this type.

ROUND COVER WITH OPENING IN CENTER

C189. Pl. 36. Projecting ring, slightly everted, around opening. For pithos? Cf. **B73-B76** above.

STANDS(?)

C190. Pl. 36. Cylindrical stem terminating in a flaring foot, concave beneath. D. foot *ca.* 0.32.

C191. Pl. 36. Cylindrical stem with triangular cut-out; broad ridges, square in section, at bottom on outside.

OTHER SHAPES

C192. Pl. 36. Thick-walled vessel with three horizontal incised lines.

LEAD

C193 (AO.105). Pl. 37:a. L. 0.05, W. 0.016. Folded strip, originally about 0.095 long.

C194 (AO.249). Pl. 37:a. L. pres. 0.041, W. 0.011. Curving strip with edges rolled inward toward one side.

C195 (AO.250). Pl. 37:a. L. 0.041, W. 0.027. Folded sheet with two notches at broader end.

BRONZE

Two uncatalogued fragments (AO.279, A, B) of sheeting with small rivets.

TERRACOTTA OTHER THAN POTTERY

The clay of the terracotta objects is similar in general to that of the fine pottery. The objects are all unpainted, except as noted.

SPOOLLIKE WEIGHTS

Sixty small spoollike terracotta objects were found in the Archaic well. They are clearly related to similar objects which occurred in large numbers in the Classical deposits. It is argued below (p. 102) that these objects probably served as loomweights, and it is proposed to call them "spoollike weights" in order to distinguish them from the pyramidal and conical loomweights more usual at other sites.

All those found in the Archaic well are broad and squat and fall within what is here designated Type 1 (Ill. 19, p. 101 below). This type comprises those which are round in section at all points, with a length slightly less than the diameter of the ends. The ends are usually fairly pronounced and the waist broad and

sometimes nearly cylindrical. Most are slightly convex at either end and will not rest securely on a flat surface.

Type 1 has been further divided into two subtypes (Ill. 19); these are convenient for descriptive purposes, but there is no sharp distinction between them, and some spools are assigned fairly arbitrarily to one or the other subtype.

Spoollike weights of the first subtype, Type 1 A (Ill. 19, Pl. 39, **C196–C201**. Average dimensions: L. 0.038, D. ends 0.044, D. waist 0.035), tend to have rounded ends which form a continuous curve with the waist. The waist itself tends to be concave rather than cylindrical. They are often distinctly convex at either end

(e.g. **C196**, **C197**, **C201**). Fifty may be assigned to Type 1 A.

Those of Type 1 B (Ill. 19, Pl. 39, **C202–C205**. Average dimensions: L. 0.049, D. ends 0.05, D. waist 0.036) tend to be larger than those of the first subtype and to have ends which are set off more pronouncedly from the waist. The waist itself tends to be cylindrical. They tend to be flat, or nearly flat, at either end.

Almost all the spoollike weights found in the Classical deposits belong to Types 2 and 3 (p. 100 below) and can be clearly distinguished from the Archaic ones (Ill. 19). The few examples of Type 1 in those deposits are probably either re-used or are strays from the Archaic period (see below, p. 100). It is worth noting that the Archaic spoollike weights tend to be finer in fabric, better fired, and more carefully and regularly fashioned than their Classical counterparts. A few spoollike weights of Type 1 have been found at other sites (see below, p. 102); those with the best context, from Perachora, are dated to the second half of the 6th century B.C. (Payne, 1940, no. 268, etc.).

The catalogue below is confined to a representative selection.

TYPE 1 A

C196 (AO.132). Pl. 39. L. 0.042, D. ends 0.045, D. waist 0.033.

C197 (AO.150). Ill. 19, Pl. 39. L. 0.041, D. ends 0.043, D. waist 0.035.

C198 (AO.59). Pl. 39. L. 0.038, D. ends 0.045, D. waist 0.035.

C199 (AO.152). Pl. 39. L. 0.036, D. ends 0.046, 0.047, D. waist 0.035.

C200 (AO.221). Pl. 39. L. 0.038, D. ends 0.048, D. waist 0.035.

C201 (AO.192). Pl. 39. L. 0.041, D. ends 0.042, 0.043, D. waist 0.034.

TYPE 1 B

C202 (AO.74). Pl. 39. L. 0.043, D. ends 0.044, D. waist 0.035.

C203 (AO.243). Ill. 19, Pl. 39. L. 0.049, D. ends 0.049, 0.050, D. waist 0.032.

C204 (AO.453). Pl. 39. L. 0.049, D. ends 0.048, 0.049, D. waist 0.029.

C205 (AO.226). Pl. 39. L. 0.045, D. ends 0.049, 0.050, D. waist 0.03.

SPINDLE WHORLS

BICONICAL

C206 (AO.130). Pl. 36. D. 0.04, H. 0.03.

C207 (AP.446). Pl. 36. D. 0.041, H. 0.029.

C208 (AO.463). Pl. 36. D. 0.04, H. 0.023. Shape somewhat irregular.

OTHER

C209 (AO.447). Pl. 36. D. 0.042, H. 0.032. Biconical but with cylindrical stem; ridge around perforation opposite stem. Whole surface decorated with concentric circles in brown glaze.

C210 (AO.233). Pl. 36. Fragment, probably from knob of lid, re-used as whorl. D. 0.031, H. 0.018. Roughly conical; narrow bored perforation. Originally covered in dark brown glaze.

OTHER OBJECTS

C211 (AO.456). Pl. 36. Bobbin. D. 0.017, H. 0.011. Somewhat concave at top and bottom.

C212 (AO.258). Pl. 36. Fragment of broad strap handle and part of pot wall, re-used. L. 0.056. Deep notches in preserved edges of pot wall and long groove opposite handle. Brown glaze on outer surfaces.

C213. Pl. 36. Sherd re-used in similar way. Notches at edges which continue as shallow grooves on inner surface. Brown glaze on outer surface.

COMMENTARY

Detailed parallels have been cited in the catalogue where relevant. It therefore remains here to make some general observations and to arrive at an estimate of the chronology of the finds in the well.

All the pottery is of local manufacture, to judge by its fabric. Most of the shapes show a fairly clear line of descent from their counterparts in the local Geometric repertoire (e.g. krater **C1**; round-mouthed jugs, **C64–C71**; broad kantharoi, **C104–C109**; cups with high, upright rim, **C129–C131**; pyxis, **C136**), and others probably developed in Elis during the 7th century (e.g. bowls, **C26–C50**; narrow-necked juglet **C84**; tall kantharoi, **C110–C127**). Those shapes which were inspired or strongly influenced by Corinth and Laconia (e.g. column-kraters, **C2–C6**; plates, **C54–C63**; oinochoai, **C74–C83**; aryballoi, **C102–C103**; cups with low, everted rims, **C132–C135**) frequently have characteristics which allow them to be distinguished from their models. The decoration also has a strongly local character. The few dark-on-light pieces with human or animal figures (the man with a sword on **C1**, the man on horseback on **C54**, the birds **C15–C19**, the fish on **C146–C149**) have counterparts outside Elis, as the parallels cited in the catalogue show; nevertheless, the failure to use incision and the apparent clumsiness of style (**C1** should probably here be excepted) is typical of local production. The inspiration for the floral motifs, whether dark-on-light (e.g. **C55**) or light-on-dark (e.g. **C2**), seems distant indeed, and the truly abstract patterns (such as those on the bowls **C26–C46**) are surely a local specialty.

Our pottery is closely related to the Elean pottery of the Orientalizing and Archaic periods from Olympia. That from the many wells published by Gauer (1975) tends to be less elaborately decorated than ours, doubtless because it was of strictly utilitarian character (the bronzes from these wells more than make up for what the pottery lacks!). Pottery from other contexts at Olympia, however, provides further parallels for the more elaborate pieces at Armatova (see, e.g., **C2**, **C30**). The evidence from these two sites, taken together, is sufficient, in my opinion, to justify our recognition of a true local style in Elis. This distinctive Elean pottery was clearly restricted almost entirely to Elis and its immediate environs, although it is worth noting that a few pieces from Tocra look suspiciously Elean (e.g. Boardman and Hayes, 1966, nos. 264, 993, 1020).

The character of the filling of the well (p. 34) does not permit us to make any chronological distinctions on stratigraphic grounds. We are therefore dependent upon external comparisons to estimate the range of time covered by the material in the well. The latest pieces provide a fairly clear lower limit (e.g. **C26**, **C73**, **C74**, **C102**, **C110–C125**, **C134**, **C136**; cf. the comparisons cited above in the catalogue). They appear to date no later than the mid-6th century B.C. and may perhaps be dated a decade or two earlier. We shall not, in any case, be far wrong in supposing that the well was filled about 550 B.C. An upper limit is much more difficult to determine, given the relative scarcity at Olympia of pottery of the 7th century B.C. which might be used for comparison. A few pieces may probably be dated as early as the middle or late 7th century B.C. (e.g. **C1**, **C15–C20**, **C129**, **C146**), and

there is nothing necessarily earlier than these. On the other hand, it is possible that the round-mouthed jugs (**C64–C71**) represent a continuous series which extends back nearly as far as the Geometric period. Most of the pottery appears to fall between these two chronological extremes. A subjective impression, given here for whatever it is worth, is that much of it belongs to the late 7th century and the first quarter of the 6th century B.C.

PART D. CLASSICAL

The broad, flat top of the hill Armatova was the principal location of the town of Classical times. Its general features were described above in the Introduction. The hilltop was probably chosen because of the protection it gave from flooding and perhaps because of its potential for defense. The town may have been of considerable size, since Classical sherds were found in significant quantities in all our trenches on the top of the hill. Modern mechanical plowing, however, has done much damage, and it was only in two places near the western end of the hill (Areas B-E and Area C) that substantial architectural remains came to light. The main approach to the hilltop, as already mentioned, was probably from the northeast (via the “northeast plateau”).

Remains of houses and a well of Classical times were also found in the fields to the northeast of Armatova (Map 3; see especially Areas F 4 and F 5). They suggest that houses were dotted about here and there in the fields in much the same way that modern houses still were before the dam was constructed.¹

The walls of the Classical buildings were evidently built in a time-honored way: socles were first constructed of unworked stones, and these supported superstructures of mud-brick. There is no evidence that stone was ever cut or dressed for building purposes.² Sandstone was the predominant material for the socles, but limestone also occurs. There are no natural outcrops of such rocks in the immediate vicinity; the stones used tend to be small, however, and many of them may have been picked up in the near-by riverbeds. Fragments of roof tiles were also occasionally included in the socles. Evidence of the mud bricks only occasionally came to light, and the dimensions could not be determined in any case. Two enclosed courtyards or rooms in Areas B-E were paved with stones (House B, Courtyard 7; Building D, Room 21); otherwise the floors were of beaten earth. Here and there flat stones were found in horizontal alignment in association with the floor deposits; some of these may have served as supports for wooden posts (e.g. Areas B-E, House C, Room 14). The buildings were roofed with tiles of the Laconian type, and these were found in great quantities, resting where they had fallen on the upper surface of the floors. A selection is illustrated (Ill. 20 [p. 105 below], Pl. 40). A single angular ridge tile (**D167**) and several fragments of flat Corinthian-type tiles (e.g. **D164–D166**) were found in the settlement, but it is unlikely that they were used for roofing.³ There is no evidence to suggest that any of the buildings had more than one story.

¹ Some of these houses, like their modern counterparts, were probably used mainly in summer and may have served for storage of agricultural produce as well as for living quarters.

² The only possible exception is a cut limestone block found in the fields to the northeast of Armatova hill (Pl. 18:c), and this could well date to the Roman period or later still.

³ **D164–D166** were found in two separate structures in Area C; the angular tile **D167** and two other fragments of flat tiles not included in the catalogue were found in Well 8 in Area C. The flat tiles may well have served as convenient working surfaces for domestic tasks. Cf. Olynthos, where the excavators also concluded that the few Corinthian tiles found were not used for roofing (Robinson and Graham, 1938, p. 234).

Very little evidence for interior furnishings came to light. House C, Room 14 in Areas B-E probably had a row of posts near one wall, and the adjacent room (15) had a rectangular stone construction near one corner. A large stone near one wall of House C, Room 12 in Area C may have been a seat or working surface. There was no evidence for hearths inside any of the rooms. Many of the domestic activities may have been carried on outdoors, to judge by the evidence from Areas B-E, Courtyard 12 and Place of Domestic Activity 29.

In general, the remains of the Classical settlement suggest that Elean Pylos was not an elaborate or sophisticated place, and it is perhaps better described as a village than as a town. The houses seem usually to have been spaced at some distance from one another, and there is little reason to think that they were sited according to any system of town planning. A possible exception to this view is in Areas B-E, where some houses are clearly laid out in relationship to one another, but even here the variation in alignments does not permit one to postulate a conventional grid system (see further discussion under Areas B-E). Three houses in Area C (Houses A, B, and C) appear to have been loosely grouped around a well (8). No evidence turned up of communal arrangements for the disposal of waste water, although at least one individual drain was found (e.g. Water Channel 6 in Area C; another possibly in Areas B-E, Place of Domestic Activity 29). The houses themselves were very simple in terms both of plan and furnishings, as one would expect of a rural village. Overall plans seem to have been roughly rectangular, although corners by no means always form right angles. Many houses may have had no more than a couple of interconnecting rooms (possible examples are House A in Areas B-E and Houses A and C in Area C). Houses B and C in Areas B-E are more complex, but even there, as is discussed below, one can recognize few points of similarity with the more elaborate domestic architecture of towns such as Olynthos (Robinson and Graham, 1938) and Halieis (Boyd and Rudolph, 1968) or town and country houses in Attica (well summarized in Jones, 1975); our best parallels seem to be with the only partly known remains at Makryisia near Olympia (Yialouris, 1956), which probably represent equally simple building practices.

It is appropriate to mention here that no evidence came to light for the existence of communal buildings of either secular or religious character. If there were structures which served as town hall, temple, shrine, or the like, they must have been of the same general character as the houses. Nor, with the possible exception of a few widely scattered fragments of terracotta figurines (**D78–D81**), did any evidence turn up on or around Armatova of votive offerings which might presuppose that any shrine existed. Perhaps the inhabitants of Pylos depended upon the city of Elis to provide both civic and religious amenities.

The Classical remains which were investigated, both on the hill and in the fields below, appear to fall within a fairly narrow range of time. There is clear evidence for more than one phase of activity in only two instances, both in Area C (Structure 2 earlier than House H; several strata in Room 7), although other instances may be possible (Areas B-E, House D, Room 25 may be earlier than the adjacent structures; the house in Area F 5 may be earlier than Grave 1). The pottery shows no signs of development or change within each Area (with the exception of the well and house in Area F 4, which contained some earlier

material; see below). The pottery from the hilltop in particular, whether from exploratory trenches or from the two more extensively excavated Areas (Areas B-E and C), is notably homogeneous and can all be dated to the last quarter of the 5th century and the first third of the 4th century B.C. The other datable finds, which include a seal ring (**D16**), the few terracotta figurines (**D78–D81**), the lamps (**D82, D84–D88, D90–D95**), and the coins other than **D2** (**D1, D3–D5**), are all compatible with such a dating. **D2**, a tiny Elean coin, belongs to a series usually dated *ca.* 363–323 B.C. Perhaps this series should be considered to have started a few years earlier. Otherwise, **D2** is probably best regarded as a later stray. In any case, it seems unwise to bring the date of our settlement down so far on the basis of a single coin and in opposition to the unanimous testimony of the other finds.

There are only a few indications of possible activity on the hilltop between the Geometric period (Part B) and the last quarter of the 5th century B.C.: four spoollike weights of Archaic type from various contexts (see below, p. 100), a fragment of a jar or pithos (**D314**) with an inscription, probably Archaic, from an exploratory trench in Area D, and a coin (**D4**) found in an unstratified context in Areas B-E. The latter, an Aeginetan “turtle”, might well have remained in someone’s possession, even if not circulated, in the later 5th century B.C. After the occupation of the Classical period, there appears to have been a long period of inactivity on the hilltop; no sherds were recognized which could clearly be dated between the Classical period and the time of Byzantine or Frankish occupation (Part F below).

No evidence was found of fire or violent activity which might explain the desertion of the Classical village on the hilltop. One building was evidently destroyed by fire, but this took place before the end of the settlement (see Area C, Structure 2). Given the chronological picture just described, it is a reasonable hypothesis to connect the abandonment of the hilltop with the disasters which befell Pylos, according to the account of Xenophon (see Appendix 1, II and III), in 365/364 B.C.

The pottery from Classical contexts in the fields below the hilltop (Areas F 4, F 5, and K) is not quite so homogeneous as that from the hilltop itself. Some of that from Area F 4 may go back as far as the third quarter of the 5th century B.C., and the well in this area also contained some Archaic pieces (see below), presumably strays from the Archaic period of occupation (Part C above). As is the case on the hilltop, however, none of the Classical structures excavated in the fields, including Graves 1 and 2, appear to date later than the first third of the 4th century B.C. The next significant period of activity is in the Roman period (Part E below), but sherds and coins attest that there was also some activity in the later 4th century B.C., if not still later (pp. 117, 122, below).

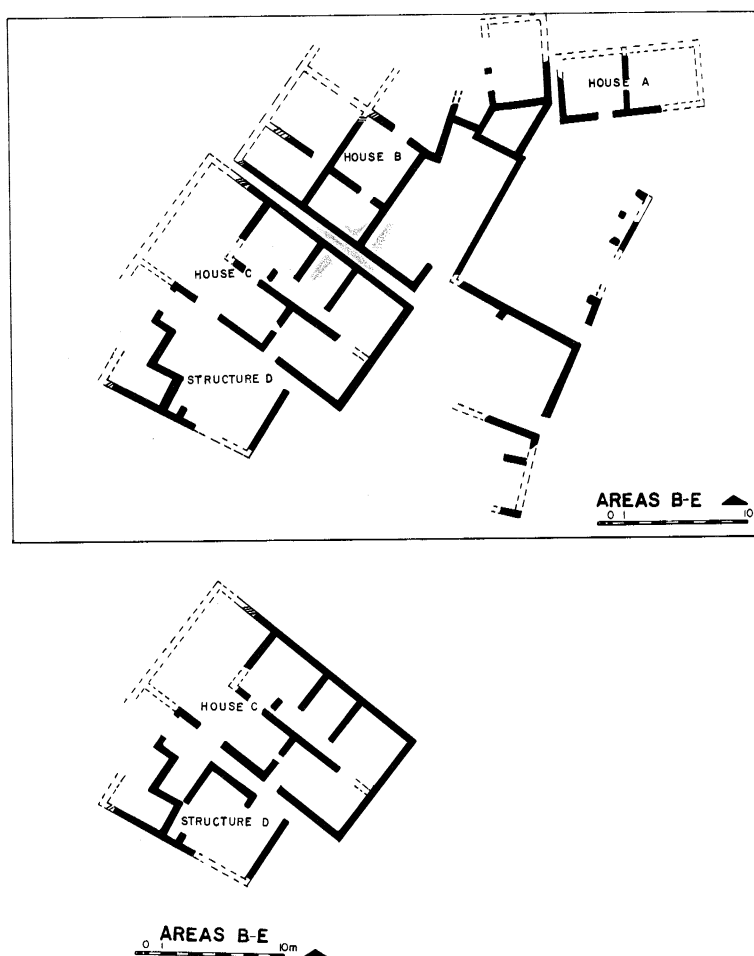
A detailed description follows of the remains investigated in the various Areas, starting with those on the top of Armatova hill and continuing with those in the fields below. A summary list of movable finds is given for each archaeological context. All objects other than pottery are listed, including fragments and other items not judged worthy of cataloguing. Except in a few instances, pottery is mentioned only if it is included in the catalogue. The catalogued finds are identified in the lists by a number prefaced by the letter D.

It is to be understood that the architectural dimensions given in the following descriptions are only approximate, given the state of the remains and the somewhat irregular plans of the buildings. Widths of doorways, in particular, were in many cases very difficult to estimate.

1. AREAS B AND E

(Fig. 2, Ill. 13, Pls. 5, 6)

These areas, which were combined in the course of the excavation, produced the most extensive Classical remains. They are located at the western end of Armatova, near the north-western edge of the hill (Maps 3, 4). Areas B-E were bordered at the northwest by an



ILL. 13. Alternative plans of Areas B-E with structures partly reconstructed

eroded bank which drops almost vertically for six or seven meters and then more gradually, to the Peneios riverbed some 20 meters below the top of the hill (Pl. 3:b). During the excavation, a large, roughly triangular space was cleared adjacent to the bank. Houses undoubtedly continued well beyond this space originally, but the evidence has been lost at the northwestern side because of erosion, and time did not permit us to extend our trenches further on the other sides. In 1964 Themelis partly cleared the well of the Geometric period located at the very edge of the hill (Part B); he also noted Classical house remains (our House B, Courtyard 7) which extended over the top of the well (Themelis, 1965, p. 217, no. 9).

The surface of the hill was almost perfectly flat before excavation began. The surviving stones of the walls were encountered everywhere about 0.20 m. below the surface; many are marked from plowshares scraping over them, and in places the walls have completely disappeared (e.g. the northwestern side of House B, Rooms 10 and 11 and House C, Room 14). The deposits in the houses extend to an average depth of about 0.20 m. beneath the tops of the walls; the greatest depth was reached in the test trench in House B, Rooms 8 and 9 and House C, Room 19. The upper parts of many of these deposits have almost certainly been disturbed or carried away by erosion and plowing.

There were no definite stratigraphic indications bearing on the relative chronology of the structures in Areas B-E. Some slight evidence suggests that Room 25 may have been earlier than the structures around it (see below); all the other rooms and buildings could have been in contemporaneous use.⁴

The actual-state plan (Fig. 2) and general views (Pls. 5, 6) give a fair idea of the state of preservation of the buildings, and an interpretative drawing at a smaller scale (Ill. 13) shows two plausible reconstructions of their ground plans. The excavated space is dominated by what is taken here to be two large houses, House B and House C, oriented roughly northwest-southeast and divided by a narrow alley (Passageway 13). To the southwest of House C, and probably closely connected to it, is a third building, Structure D. The rooms at the east side of House B (Rooms 4-6) are in a different alignment from the rest; nevertheless, as is argued below, they appear to belong to the house. In the same alignment as these rooms, and separated from them by a narrow passageway (3), is another House (A) which is not so well preserved as the rest.

To the south of House A and to the east and southeast of Houses B and C and Structure D are two large spaces which were at least partly enclosed but were probably unroofed (Courtyards 27, 30); a third adjoining space (Courtyard 31) is bordered at the southeast by a group of walls, possibly belonging to a shed (Rooms 32, 33), aligned slightly differently from the structures already mentioned. There may also have been a shed (28) built against the southeastern wall of Courtyard 27.

⁴ Since time did not permit us to explore fully all the floor deposits uncovered or to dig test trenches in every room, it is possible that the earlier phases of some of the rooms or buildings have been left undiscovered; when we did dig down to sterile ground in a test trench between Rooms 8 and 9, however, we found no evidence of earlier phases.

No accurate estimate is possible of the length of time for which the buildings were in use, but it need not have been a long time and could well have been as short as a quarter of a century. The pottery from Areas B-E (see below) forms a homogeneous group and shows no change or development; presumably it covers no long time span. The dating of the settlement to the last quarter of the 5th century and the first third of the 4th century B.C. has already been discussed. The silver coin of Aigina (**D4**), which is undoubtedly earlier than the other finds from Areas B-E, comes from the disturbed surface layer.

No evidence was found of fire or violent activity that might explain the desertion of the structures in Areas B-E. It was suggested above (p. 68) that this desertion resulted from the events of 365/4 B.C. described by Xenophon (Appendix 1, II and III).

Inasmuch as the architecture of Areas B-E is more complex than elsewhere in the Classical settlement, it is worthwhile briefly to attempt some comparisons with other sites of roughly the same date. At first glance, Houses B and C might seem to have something in common with towns laid out according to an orthogonal plan such as Olynthos (see especially Robinson and Graham, 1938) or Halieis (Boyd and Rudolph, 1978), if it is taken for granted that we have found only the edge of such a carefully planned part of the settlement. The most suggestive detail is perhaps Passageway 13 between Houses B and C, which resembles the "drainage alleys" traversing the middle of the blocks of houses at Olynthos (see, e.g. Robinson and Graham, 1938, pl. 94). Passageway 13, however, is considerably narrower than the Olynthos alleys (average width *ca.* 0.87 m. as opposed to 1.40 m. at Olynthos; Robinson and Graham, 1938, p. 36) and contains no drain. Furthermore, the absence of a street perpendicular to Passageway 13 and the difference in alignment between it and Passageway 3 between Houses A and B strongly militates against the suggestion that an orthogonal grid was used. At Halieis, where alleys through the long axes of the blocks are apparently lacking, the blocks depart somewhat from a strictly rectangular plan (see Boyd and Rudolph, 1978, fig. 2); nevertheless, there, as in any town or city with an orthogonal plan, the streets play an important role. At Pylos, on the other hand, we found no evidence for streets. It is perhaps worth noting in this connection that none of the structures in Areas B-E correspond in alignment to any of those in Area C, although the nearest of them are only some 20 meters away. In short, therefore, it appears very unlikely that an orthogonal system of planning was in use anywhere at Pylos.

Probably the most unusual feature of the layout of Areas B-E is the apparent existence of large enclosures immediately adjacent to the houses (i.e. Courtyards 27, 30, and 31). Perhaps these spaces were enclosed in order to maintain the boundaries of individual private plots of land; possibly, too, they served as pens for animals.

Houses B and C are sufficiently complex in plan that it is worthwhile considering whether they have any relation to Greek houses from other sites. Such comparisons are greatly hindered by the fragmentary nature of the evidence from Pylos. House B may have had a court more or less centrally placed (i.e. Courtyard 7) and opening into at least one suite of rooms (10, 11). Such courts are a common feature of Classical and later houses. The apparent lack of communication, however, between the adjacent Courtyard 12 and the rest

of the house is very unusual. The rectangular block of rooms which make up House C (i.e. Rooms 14–18) is also unusual in that it comprises two rows of rooms; elsewhere, such as in the *pastas* house at Olynthos, there is normally but a single row of rooms, to which the hall-like *pastas* gives access (Robinson and Graham, 1938, pl. 94). One of the house plans from Halieis shows an arrangement somewhat similar to Houses B and C (Boyd and Rudolph, 1978, fig. 3, Area 4 house), although it has fewer rooms and they are differently aligned.

HOUSE A (ROOMS 1 AND 2)

A structure near the northeast edge of the excavated space, bounded on the west by Passageway 3 and on the south by Courtyard 27 with its outdoor work area (Place of Domestic Activity 29). North and east sides missing; the stones to the north of and in line with Wall AM may mark the position of the north wall. Probable doorway (W. *ca.* 1.07 m.) leading through Wall AK into Room 1 near its southeast corner; threshold of two stones. Another probable doorway in Wall BC between Rooms 1 and 2. A third doorway possible from Passageway 3 through Wall AM near its north end. Room 1 contained many tiles, apparently originally stacked on edge in parallel north–south rows next to Wall A (Pl. 6:d). It may have served for storage, or some renovation may have been in progress when the site was abandoned.

Room 1. Flint or chert: blade, probably Middle Helladic (A57; see above, Part A). TC: lamps (D91, D95); spoollike weights (D120, D125). Uncatalogued: three objects of iron; five TC spoollike weights (including three of Type 2 A: AO.436, with

illegible oval seal impression at one end, 0.016 × 0.011; AO.437, with illegible oval seal impression at one end, 0.016 × 0.012; AO.413).

Room 2. No significant finds.

PASSAGEWAY 3

A narrow passageway (W. *ca.* 0.65 m.) separating House A from House B, Rooms 4 and 6 to the west. To the south it opens up and gives access to Courtyard 29; its north end is missing. There may have been a doorway opening from it through Wall AM into Room 1, but the evidence is unclear.

Uncatalogued: one object of iron; two TC spoollike weights.

HOUSE B (ROOMS 4–12)

Probable domestic unit. Bounded to the southwest by Passage 13, to the south by Courtyard 30, to the southeast by Courtyard 27, and to the east by Passageway 3. The whole north side lost through plowing and erosion at the edge of the hill. Courtyard 7 overlies a well of the Geometric period (see Part B).

Rooms 8–11 are closely connected with one another and clearly belong to a single house. Courtyard 12 is also closely connected (see below) despite its apparent lack of a doorway communicating directly with Rooms 8 or 9. Courtyard 7, which communicates directly with

Room 8, was probably an inner courtyard. The association of Rooms 4–6, although more tenuous, is supported by the fact that their walls are continuous with those of the other rooms without an intervening passageway. Rooms 8–11 had clearly been roofed and contained many fallen tiles of Laconian type; Room 4 was probably also roofed and perhaps Rooms 5 and 6.

No main access from the outside is preserved. An opening at the south corner gives access to Courtyard 12, but it is not clear how the latter communicated with the rest of the house. There is no evidence for a doorway communicating directly with Passageway 13, as far as it remains. Presumably the main access was from the north or east and is hence not preserved.

ROOM 4

Probably a room, but badly damaged. North side missing. An opening in the west wall communicating with Room or Space 5 is unusually wide (*ca.* 1.30 m.) for a doorway. It is uncertain whether there was a rectangular pillar or a continuation of the wall to the north of the opening. A mass of fallen stones and pottery was found in the southwest corner.

TC: spoollike weight (**D123**). Uncatalogued: one object of iron; one TC spoollike weight (AO.483, of Type 2 A).

ROOMS OR SPACES 5 AND 6

Enclosed spaces, perhaps roofed and used as rooms. Room or Space 5 polygonal in plan, badly damaged and lacking north and west boundaries; it communicates with Room 4 by means of an opening or doorway (see above). Wall AR abuts Walls AS and AP and may have been built subsequently; if so, Room or Space 5 may originally have had access to Courtyard 12. Room or Space 6 is an irregular quadrangle, without apparent doorways.

Room or Space 5. Iron: spearhead (**D43**); object (**D72**). TC: lamp (**D92**). Pottery: krater (**D248**); lids (**D262**, **D263**). Uncatalogued: two objects of iron (including AO.241); two TC spoollike weights.

Room or Space 6. Uncatalogued: two objects of iron; one TC spoollike weight (AO.380, of Type 2 A).

COURTYARD 7

Probably an unroofed courtyard. First investigated by Themelis (1965, p. 217, no. 9). North and west sides missing. The walls at the southeast and southwest sides meet at an angle of about 74°. A doorway (W. pres. *ca.* 1.30 m., but probably originally narrower) through Wall Y communicates with Room 8. Evidence is lacking to indicate whether there was also a doorway to Room 5. Paved with an originally continuous layer of irregular flat stones, more of which were preserved at the time of the first excavation (Themelis, 1965, pl. 249:b; some of the stones visible in this photograph look as if they might have formed a

gutter within the courtyard). The pavement originally extended over the top of the well of the Geometric period at the northeast edge of the hill (see Part B).

No significant stratified finds.

Room 8

Missing north corner. Approximately square in plan; L. (NW–SE) 4.75 m., W. 4.7 m. For doorway to Courtyard 7, see above; doorway communicating with Room 9 (W. 1.15 m.) off center in shared wall. There is sufficient space at the missing end of Wall S for a doorway with a width of up to 1.1 m. communicating with Room 10. A small test trench aligned north–south and passing through the doorway between Rooms 8 and 9 (L. 2.7 m., W. 1.0 m.; visible in Pl. 5:b, c) was excavated to virgin soil, which here was reached at a level of about 0.45 m. below the tops of the walls. The lowest 0.10 or so of deposit in this trench contained few sherds and clearly predated the floor deposit. See Room 9 below for objects found near or within the doorway between the two rooms.

TC: loomweight (**D96**). Uncatalogued: one TC spoollike weight (AO.260, Type 2 A).

Room 9

Rectangular; L. (NW–SE) 4.75 m., W. 3.0 m. For doorway to Room 8 see above. Six loomweights found in Room 9 (**D98**, **D104**) or in the doorway between Rooms 8 and 9 (**D100**, **D102**, **D103**, AO.142) suggest that there was a loom in Room 9. See Room 8 above for a test trench which passed from Room 8 to Room 9.

TC: loomweights (**D98**, **D104**). Pottery: krater (**D242**); lid (**D261**). Uncatalogued: one TC spoollike weight (AO.239, of Type 2 A).

Within or in close proximity to the doorway be-

tween Rooms 8 and 9. TC: loomweights (**D100**, **D102**, **D103**). Pottery: lekythos (**D221**); coarse amphora (**D294**). Uncatalogued: two objects of iron (including AO.206); one TC loomweight (AO.142).

Room 10

Probably square or rectangular; only south corner preserved. Doorway communicating with Room 11 (W. 1.30 m.) beside Wall S.

No significant stratified finds.

Room 11

Probably rectangular; missing northwest side. W. (NE–SW) 3.05 m.; for doorway to Room 10, see above. The southwest wall of Room 11 abuts the west corner of Room 9 (i.e. the corner of Walls S and P), leaving open the possibility that Rooms 10 and 11 were built later than Rooms 8 and 9; more likely this was an accident of construction and all four rooms were planned as a suite from the beginning.

TC: spoollike weight (**D128**). Uncatalogued: one TC spoollike weight (AO.237, of Type 3).

COURTYARD 12 (Pl. 6:e)

Courtyard 12 was probably part of House B. Probably unroofed; the many roof tiles found within it are likely to have come from the collapse of adjacent rooms. Possibly partly covered with a shed roof. Roughly rectangular in plan but very irregular; max. L. (NE–SW) 11.6 m., max. W. 5.6 m. Doorway near south corner, communicating with Courtyard 33. There may originally have been an opening at the north if Wall AR at the southwest side of Room 5 is a later addition (see above). While Courtyard 12, as preserved, does not appear to communicate directly with Rooms 7–11, it shares several walls with them and would appear to have been constructed at the same time. It has no close connection with any other structure.

Courtyard 12 was apparently used as a work space and perhaps for washing. A large basin (**D298**) was found near its northwest wall. The paved area just northwest of the center of the courtyard was perhaps used for domestic tasks. The floor deposit contained an unusually large number of objects, which suggests that the space was heavily used. Objects were especially concentrated near the corner of Walls R and Y and that of Walls P and Q. Sixteen spoollike weights were found immediately to the north of the northeast end of Wall Q within a space with a diameter of about 1.1 m. (**D108**, **D109**, **D122**, **D126**, **D131**, AO.317, AO.318, AO.336–AO.340, AO.342, AO.345, AO.347, AO.348), and two others were found about 0.70 m. distant from the main group (**D105**, **D114**). If these were really loomweights, as is suggested below (see discussion in catalogue of finds), then it is possible that a loom was set up in this part of the courtyard, perhaps beneath a shed roof. A loomweight of more conventional type (**D97**) was found among the spoollike weights of the main group.

Coins, bronze: Achaean League (**D5**); illegible (**D6**). Bronze: vessel rim(s) (**D7**, **D8**); fragment with gold inlay (**D21**). Lead: weight(?) (**D25**); clamp (**D34**). Iron: arrowheads (**D40**, **D41**); nails (**D48**, **D51**–**D53**, **D55**); hook (**D60**); other objects (**D65**, **D68**, **D71**). TC: lamp (**D90**); loomweights (**D97**, **D101**); spoollike weights (**D105**, **D108**, **D109**, **D114**, **D122**, **D124**, **D126**, **D131**). Pottery: small handleless bowls (**D180**, **D181**); skyphoi (**D193**, **D195**, **D197**); stemmed cups (**D201**, **D202**); cups or bowls (**D206**, **D211**); small oinochoe (**D217**); lekythoi (**D223**, **D228**, **D229**); krater (**D247**); plate (**D252**); coarse amphora (**D295**); basins (**D298**, **D300**, **D302**). Uncatalogued: 12 objects of iron (including nails

AO.12, AO.389); three objects of lead (including clamps AO.325, AO.326); 20 TC spoollike weights (Type 1 A: AO.263. Type 2 A: AO.317; AO.336; AO.337, possible seal impression on one end; AO.338; AO.339; AO.342, two incised lines making a cross at one end; AO.348; AO.388; AO.401, illegible seal impression at one end, L. 0.012 m.; AO.402; AO.406, illegible oval seal impression on one end, 0.017 m. × 0.013 m.; AO.407; AO.520, illegible oval seal impression on one end, L. 0.015 m. Type 2 B: AO.340; AO.345; AO.347, illegible oval seal impression on one end, 0.015 m. × 0.012 m.; AO.385, oval seal impression on one end, possibly the same as that on **D115**. Type 3: AO.318, AO.343).

PASSAGEWAY 13

Long, narrow passageway or street between House A and House B; northwestern end lost through erosion. Narrowing slightly from southeast to northwest: W. 0.95 m. (southeast

end), 0.80 m. (northwest end). Southeast end communicates with Courtyard 30 (and from it with Courtyard 12). No evidence was found to suggest that any of the rooms on either side opened directly on the passageway.

TC: one spoollike weight (**D111**). Pottery: small handleless bowl (**D183**); cup or bowl (**D210**); tall lekythos (**D231**); lid (**D260**). Uncatalogued: one object of iron; one TC spoollike weight.

HOUSE C (ROOMS 14–19)

Rectangular building comprising at least six rooms. Bounded on the northeast by Passageway 13, on the southeast by Courtyard 30, on the south by Structure D (which may have been closely connected; see below); damaged and partly missing towards the west and northwest through plowing and erosion.

External access from the southwest by means of a doorway leading into Room 18 and probably another into Room 19 (see below). There was probably further access from the northwest, where the evidence is lost. There is no evidence to suggest doorways opening to the outside on the southeast or northeast sides (the apparent gap in Wall O by Rooms 15 and 16 leaves too narrow a space for a doorway into another room; it probably results from plow damage).

All the preserved rooms appear to have been roofed, since they contained many roof tiles resting on the floor deposits (but cf. Room 18 below).

Room 14

Missing through erosion and plowing on south, west, and northwest sides. Probably communicated with Room 15 by a doorway through Wall AA near south corner (W. uncertain). Four stone slabs, evenly spaced, parallel to Wall AA may have been supports for a row of wooden posts.

Iron: arrowhead (**D42**). Pottery: skyphos (**D194**).
Uncatalogued: one bronze coin; one object of iron.

Room 15

Roughly square; L. (NE–SW) 4.75 m., W. 4.5 m. Doorways: one through middle of Wall L to Room 18 (W. 1.35 m.); one, with threshold of several stones, through Wall N near south corner to Room 16 (W. uncertain); probably one to Room 14 (see above). A roughly rectangular construction of stones near the south corner was perhaps a partition wall; alternatively, it may have supported or served as furniture of some sort.

Iron: strigil(?) (**D62**). Pottery: small one-handled bowls (**D187**, **D188**); large one-handled bowl (**D189**); large coarse lid (**D304**).

Room 16

Rectangular; L. (NE–SW) 4.65 m., W. 2.75 m. Doorways: one to Room 15 (see above); a second through Wall M near south corner (W. 1.10 m.) to Room 17.

Lead: clamp (**D29**). Pottery: small handleless bowl (**D175**). Uncatalogued: two TC loomweights, one TC spoollike weight.

Room 17

Roughly square; L. (NE–SW) 4.6 m., W. 4.4 m. Doorways: one to Room 16 (see above); probably a second (exact position unknown) through Wall L to Room 19.

Bronze: fragments of rods or handles (**D10**, **D11**); fitting from vessel (**D12**). TC: spoollike weight (**D139**). Uncatalogued: two fragments of iron (including AO.368).

Room 18

Missing northwest side through plow damage. A few roof tiles were found in the northwest part, and it is possible that the room was partly unroofed; the damage, however, prohibits any certainty. Rectangular; L. (NW–SE) at least 6.0 m., W. 3.35 m. Doorways: one (exact width uncertain) through Wall I to the outside (i.e. to Space 24 in Building D; see below); one to Room 15 (see above); a third through the middle of Wall K to Room 19 (exact width uncertain).

TC: lamp (**D87**); spoollike weights (**D130**, **D134**). Uncatalogued: four iron nails; four other objects of iron.

Room 19

Rectangular; L. (NW–SE) 6.68 m., W. 3.5 m. Doorways: one, with threshold of several stones (W. 1.20 m.) through Wall I to the outside (i.e. to Structure D; see below); one to Room 18 (see above); probably one to Room 17 (see above). Floor deposit usually deep (max. depth from bottom of plow disturbance *ca.* 0.25 m.).

Iron: unidentified object (D64). TC: lamp (D82). Pottery: small handleless bowls (D172 , D178); one-handled bowls (D185 , D186); skyphos (D198).	Uncatalogued: one iron nail; four TC spoollike weights of Type 2 A (including AO.344, two incised lines in form of cross at one end; AO.331; AO.373).
---	---

STRUCTURE D (Rooms and Spaces 20–26)

These remains, to the southwest of House B, had been badly damaged before excavation and interpretation is difficult. Although most of the walls appear to have been in contemporaneous use, the three which enclose Room 25 (Walls AE, AF, and AG; Pl. 6:f) pose a

problem, since their level is slightly lower than the other walls and Wall AF stands in a disjointed relationship with the east corner of Room 21. If we assume that Room 25 was earlier and had gone out of use before the other structures were built, the plan of this part of the site in its later phase would be as in Illustration 13 (upper). If, on the other hand, all the structures were in contemporaneous use, the plan would be as in Illustration 13 (lower). There is no way of choosing with certainty between the two plans, but the first alternative produces a more intelligible arrangement.

Structure D clearly stood in a close relationship with House C, which it may have served as an annex. The walls are similarly aligned, and doorways communicate with Rooms 18 and 19 in House C (see above).⁵

Structure D was bounded to the northeast by House C, to the southwest by Wall C, and to the southeast, probably, by Wall T. The limit to the northwest is not clear. There may have been an outer wall at D on the plan (Fig. 2), but the remains are too badly damaged to be sure. A concentration of roof tiles was found in Room 21, which was clearly roofed. Little evidence survives to indicate which other parts of the structure were roofed.

If there was a wall at D it would presumably have enclosed a room or space at 20 on Figure 2. Space 20 communicated directly with Room 21, which is roughly square, L. (NE-SW) 2.25 m., and has a continuous paving of moderate-sized stones (Pl. 6:c). If the final plan is as in Illustration 13 (upper; see discussion of Room 25 above), the southeastern part of Structure D can be taken as an irregularly shaped courtyard accessible by doorways from the northwest (between Walls G and H), east (between Walls T and I), and perhaps the southwest (through Wall C near Wall T). Wall AD, a short spur wall, perhaps served to delineate storage areas or sheds in 22 or 23 which would have been accessible at the southwest side of this court. If the final plan was as in Illustration 13 (lower), the interior of the building can be understood as a series of passages and rooms.

The area marked 26 on Figure 2, although out-of-doors, is partly paved with moderate-sized stones and perhaps served for domestic activities (cf. Place of Domestic Activities 29 below); its proximity to Structure D suggests that it was connected with it.

No significant stratified finds. The pottery is comparable to that from elsewhere in Areas B-E.

COURTYARDS AND ASSOCIATED STRUCTURES (27-33)

Two or more large, partly enclosed courtyards occupy much of the eastern and southern parts of the excavated space in Areas B-E. They will be described more or less in order from north to south. No evidence is preserved to indicate how high the walls originally stood.

COURTYARD 27

Large space, apparently unroofed, near the northeastern side of Areas B-E. Damaged by plowing at east and southeast sides. Three sides are aligned roughly at right angles and

⁵ At Makryisia near Olympia a somewhat similar relationship obtains between Houses Γ and Β (which date to the mid-5th century or earlier; Yialouris, 1956, fig. 1); there appears, however, to be no direct communication between the two houses.

give the courtyard a northeast–southwest orientation: the northwest (Walls AL, AN), the southwest (Wall U), and the southeast (Wall V and its probable continuation Wall AT). The fourth side is bordered by the south wall of House A (Wall AK), which is aligned east–west. L. (max. NE–SW) *ca.* 19.0 m., W. *ca.* 9.75 m. Passageway 3 gives access from the north. There were probably several entrances on the southeast side; that through Wall V at the south corner of the courtyard is the best preserved (the iron latchpin **D44** was found near it). The east corner of the courtyard may have been open to the east, but it is too damaged to be sure. Possible entrance at the southwest corner to Courtyard 30; the space has a width of only 0.70 m., however, and may be the result of later damage. Shed(?) 28 and Place of Domestic Activities 29, described separately below, are within Courtyard 27.

Iron: arrowhead (**D37**); latch(?) (**D44**); cylinder (**D69**). Pottery: krater (**D243**). Uncatalogued: one bronze coin; one TC spoollike weight (AO.349, of Type 2 A, oval seal impression at one end, probably animal walking right; cf. **D115**).

SHED(?) 28

Possible spur walls (AU, AX) connected to the southeast side of Courtyard 27 may have been for a shed (cf. structures 32 and 33 below), but damage is too severe for any further comment to be made.

Uncatalogued: two TC cylinders (AO.526, broken at ends, D. 0.011 m.) possibly from a grill.

PLACE OF DOMESTIC ACTIVITY 29

An area, irregular in plan, at the northeast side of Courtyard 27, in which were found many stones and objects. The stones as preserved (Fig. 2) vary considerably in size: they perhaps served as a rough pavement, with low benches and supports here and there to set things on, but little coherent order could be recognized. In and around the middle of the stones the earth was blackened from fire and contained many sherds. Near the southwest corner of Room 1 two lines of small stones form a shallow drain, the line of which is more or less continued by two Laconian tiles; perhaps the object was to collect water from the roof of Rooms 1 and 2. The presence of both water and fire suggests that the area was used for the washing of clothing and the like; modern villages provide many parallels.

Bronze: ornaments (**D19**, **D23**). Iron: arrowhead (**D38**); nails (**D47**, **D56**); rod (**D73**). TC: figurine (**D78**); lamp (**D86**); spoollike weights (**D110**, **D115**, **D129**); tile used as drain (**D159**); cylinder (**D168**). Pottery: small handleless bowl (**D179**); stemmed cup (**D200**); cups or bowls (**D203**, **D204**); lekythoi (**D222**, **D225**); kraters (**D239**, **D241**); large coarse

lids (**D305**, **D306**). Uncatalogued: two objects of bronze (including a coin); three objects of lead; six iron nails (including AO.363), six other objects of iron; one TC lamp; nine TC spoollike weights (including AO.410, of Type 2 B, illegible oval seal impression on one end; AO.409, of Type 3; AO.314); one TC pellet (AO.525, D. 0.028).

COURTYARD 30

Large space, roughly trapezoidal, apparently unroofed. Bounded to the northeast by Wall U, to the southeast by Wall AZ, and to the northwest by Walls Q and J. The southwest side is bounded in part by Wall AB, which is preserved to a length of only *ca.* 3.8 m. A few stones in the same line toward the northwest suggest that Wall AB may once have extended further; an alternative suggestion is that Courtyard 30 communicated in large part with Courtyard 31 to the southwest. Max. L. (NW–SE) 12.90 m., W. *ca.* 7.5 m. Access at north corner to Courtyard 12 and Passageway 13; for possible access to Courtyard 27, see above. A stone slab in line with Wall U to the northwest (Fig. 2) perhaps supported a wooden post. Probable gateway through Wall AZ near south corner. A short spur (Wall W), perhaps a buttress, projects from the middle of Wall U.

Bronze: object (D9). Pottery: lamp filler (?) (D237).

COURTYARD 31 AND ROOMS 32 AND 33

Courtyard 31. Perhaps open space rather than a true courtyard. Contiguous with Courtyard 30 to the northeast; bounded to the northwest by Houses C and D and to the southeast by Rooms 32 and 33.

Rooms 32 and 33. Damaged by plowing. Walls AB, AJ, AC, and AH appear to delimit three sides of two rooms or spaces. Room 32 small, probably rectangular; W. (NE–SW) 3.45 m. Room 33 probably rectangular; L. (NE–SW) 3.45 m. Possible doorway through Wall AJ near south corner. The wall between the two rooms (Wall AC) has a finished appearance at its northwest end: perhaps there was a doorway here; alternatively, both rooms may have been narrow sheds.

Courtyard 31. TC: spoollike weight (D140).

Rooms 32 and 33. No significant finds.

UNSTRATIFIED

The following Classical objects were found in Areas B–E near the surface or in trenches outside the excavated structures. A few objects of chipped stone, probably prehistoric, were also found in these contexts (see pp. 15–17 and A48, A49, and A63 above). The trenches mentioned below are shown on Map 4.

Coin, silver (D4, near surface above east corner of Room 25). Bronze: seal ring (D16, Trench 10); unidentified object (D24, Trench B4). Lead: clamp (D33, near surface in Courtyard 27). Iron: nails (D49, Trench B10; D50, D58, both Trench B4); chisel(?) (D63, near surface immediately to the southwest of Room 18). TC: lamps (D88, near surface in center of Areas B–E; D93, Trench B6); spool-like weights (D127, near surface above Rooms 24

and 25; D133, near surface above Room 6; D136, near surface above north corner of Room 21; D138, near surface above south end of Passageway 3); stamp(?) (D170, near surface above Courtyard 27). Pottery: small handleless bowl (D182, near surface at southeast side of Courtyard 12); tall lekythos (D233, near surface at east side of Courtyard 30); krater (D240, Trench B10).

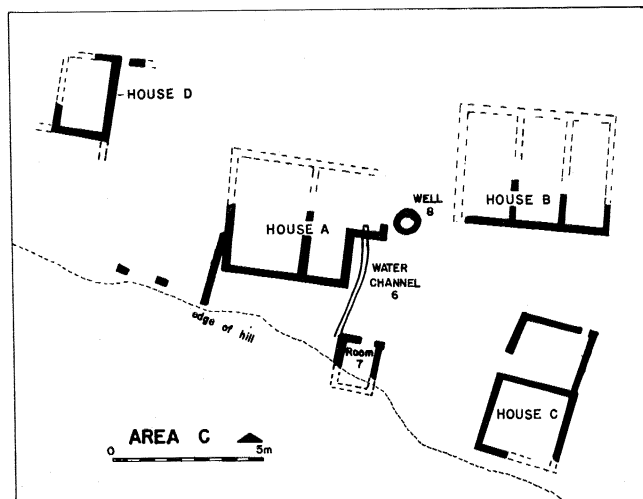
2. AREA C

(Fig. 3, Ill. 14, Pls. 7, 8)

This Area is located beside the south edge of the hill some 20 meters southeast of Areas B-E. It is bordered at the southwest by the edge of the hill, which here falls away at an angle of about 40°. The space cleared was less than that in Areas B-E, and our investigations were less complete. The houses here too must have continued beyond the excavated space, and parts of some rooms have been lost by erosion at the edge of the hill (Ill. 14). In 1964 Themelis cleared part of Room 12 (1965, p. 217, no. 10).

The remains are generally similar to those in Areas B-E in both character and state of preservation. The remains near the west side of Area C provide a sequence of activity (for details see the descriptions of specific structures below). A tile-paved pit (1) was already covered with earth when Structure 2 was built. Structure 2, in turn, evidently went out of use before or at the time that Rooms 3 and 4 were constructed. Room 7 had two phases, and it is possible that some of the other buildings also had earlier phases; time did not permit us to explore fully all the remains, or even to dig test trenches as far as sterile soil in every room.

The structures near the center of Area C all have a close relationship to one another and were probably in contemporaneous use. They include House A (Rooms 3, 4, and Courtyard[?] 5), another building (Room 7 in its later phase) and a well (8). To the northeast of these is House B (Rooms 9-11) in a similar alignment to and probably contemporaneous with them. Two other houses, House C (Rooms 12, 13) near the southwest edge of the excavated space and House D (Room 14) near the northwest edge of the excavated space,



ILL. 14. Plan of Area C with structures partly reconstructed

are similarly aligned and at roughly the same level as those already mentioned and are probably contemporary. The well (8) appears to have been deliberately filled and may have gone out of use before the final desertion. No evidence was found to indicate the presence of streets or roads.

The pottery and other artifacts recovered, despite the evidence for several phases of building activity, appear to fall within the same short time span as is represented by the Classical remains in Areas B-E, i.e. the last quarter of the 5th century and the first third of the 4th century B.C.; the abandonment of the hilltop was probably due to the events of 365/4 B.C. (see above, p. 68).

PIT 1 (Pl. 8:c)

Rectangular pit, partially lost to south by erosion at edge of hill. L. at least 1.80 m., W. 1.00 m. Single layer of fragments of tile, carefully laid at bottom, resting in sterile earth about 0.40 m. below floor of Structure 2. A group of stones, probably a support for a post in Structure 2, was located immediately above the pit (see below); the pit was therefore clearly earlier than Structure 2. The fill in the pit comprised earth with many fragments of tiles and fine pottery. The pit probably served originally for storage.

Pottery: cup or small bowl (**D205**). Uninventoried:
many fragments of small open cups or bowls.

STRUCTURE 2

Defined as a structure because the associated objects suggest that it was an enclosed, roofed space. Bounded to the southeast by Wall P, to the southwest by the edge of the hill. The other limits of the structure were not determined; a floorlike deposit continued to the edge of our trenches on the northeast and northwest sides. A row of stone constructions spaced about 2.5 m. apart at the southwest side of Structure 2 (near the edge of the hill) probably served as supports for wooden posts or columns. The first is about 2.5 m. northwest of Wall P (Fig. 3). A second was located directly above Pit 1 and is not shown in the plan. A third, further to the northwest, is represented by a single surviving stone (Fig. 3). Whether the posts were within the structure or formed one side of it is uncertain.

Structure 2 showed clear signs of burning, particularly in the vicinity of Wall P, where the floor deposit was hard packed and ashy. The north end of Wall P had clearly been partly dismantled to accommodate Wall Q, which belongs to Room 3 of House A (see Pl. 8:a). That house was therefore built after the destruction of Structure 2. The fire which evidently destroyed Structure 2 must have been an isolated event, since none of the other buildings at Armatova show any signs of burning.

A large fragment of a Corinthian pan tile (**D164**) was found near the east side of Structure 2 (Fig. 3, visible in Pl. 8:a). It was found in a horizontal position with its lower surface in contact with the floor and was probably *in situ*. It evidently provided a convenient work surface: the two surviving edges make a low rim at the north and south sides (cf. **D166**, the similar tile found in Area C, Room 12).

Coins, silver: of Elis (**D1**); of Orchomenos (**D3**). TC: clamp; two iron nails; one TC lamp (AO.510); two spoollike weights (**D119**, **D121**, **D132**); Corinthian tile (**D164**); cylinder (**D169**). Pottery: lekythos (AO.238, of Type 2 A; AO.379, of Type 2 B). Uncatalogued: one lead

HOUSE A (ROOMS 3, 4, "COURTYARD" 5)

A house comprising at least two rooms, aligned roughly east–west. North side missing (possibly constructed of material which has left no trace since the north–south walls are preserved to what must be nearly their full length). Later than Structure 2, the southeast wall of which (P) had been partly dismantled to accommodate Room 3 (see p. 82 above).

Room 3

Rectangular; L. 4.65 m., W. at least 4.25 m. A doorway through Wall S near its north end (W. 1.0 m.) communicates with Room 4; the stone foundation at the north side of the doorway might have been the support for a post rather than a continuation of Wall S.

Uncatalogued: one TC spoollike weight.

Room 4

Rectangular; L. (N–S) at least 4.25 m., W. 2.3 m. A doorway to Room 3 (see above). An opening or doorway near the northwest corner gives access to "Courtyard" 5. The gaps in Walls R and T near the southeast corner of Room 4 probably do not represent doorways to the exterior but are due to plow damage.

Iron: arrowhead (**D39**); nail (**D54**).

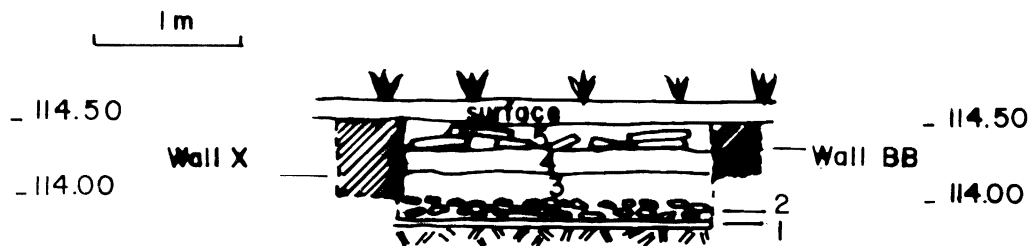
"COURTYARD" 5

The space designated "Courtyard" 5 is difficult to interpret. It evidently communicates freely with Room 4. A few stones suggest that Wall U may have made a short return to the north at V. Otherwise, "Courtyard" 5 may have been essentially open space giving access to the well (8). A nearly complete Laconian tile was built into Wall U, concave side up. It projects slightly beyond the north face of the wall and serves as a drain through which water could pass to the water channel leading south (6). Wall U is not sufficiently well preserved to show how the opening was covered. The water which passed through the channel presumably came from the well, since the channel is not located correctly to carry away runoff water from the roof. "Courtyard" 5 was probably used for washing of some sort, and the channel carried away the waste water.

No significant stratified objects.

WATER CHANNEL 6

Narrow channel leading southward from the drain through Wall U (see above). The east side is lined with stones for its whole length (*ca.* 6.5 m.) and terminates at the corner of



ILL. 15. Area C, Room 7, north half: schematic section looking north

Room 7. On the west side, the lining of stones extends only about three-quarters of this distance and is discontinuous at the south; this was probably to let the water disperse toward the southwest. The course of the channel is blocked to the south by Wall W. This wall is not so heavily built as most of the house walls, and it may have been a low retaining wall; its purpose was probably to direct the water from the drain toward the southwest, thus preventing the water from undermining the foundations of Room 7. The water channel was evidently open at the top. The catalogue includes finds made both within and near the water channel.

Coin, silver: of Elis (**D2**), found about 0.10 m. to the southwest of the southernmost stone lining the west side of the water channel. Lead: weight (**D27**), found about 0.25 east of the water channel and about 0.70 m. north of Wall Y; clamp (**D32**), found within

the water channel. Iron: nail (**D59**), found within the water channel. Pottery (all found within the water channel): skyphos (**D196**); lekythos (**D226**); coarse basin (**D303**). Uncatalogued: one iron nail.

ROOM 7 (Pl. 8:e, f)

A small rectangular room near the edge of the hill with a more deeply stratified deposit than any other Classical structure on the hilltop. Since time was short, this deposit was investigated only in the north half of the room.

Two different building phases appear to be represented (plan, Ill. 14; section, Ill. 15 and Pl. 8:f). To the earliest we may assign Walls X and Y, which bond with one another and are founded at about the same level. There was clearly a door at the north side of the room in this phase since Wall Y terminates about 0.95 m. from Wall X in a well-finished vertical surface (Pl. 8:f). No other walls of this phase were discovered, but we did not probe deeply in our trench to the east of Wall BB. The floor of the first phase was bedded on a layer of pebbles and small stones (Stratum 2 in Ill. 15). A few sherds and tiles found beneath this bedding in a layer with much clay (Stratum 1) probably predate the construction of Room 7; none of these finds appear to be appreciably different from those found within the buildings in Areas B-E and Area C. Stratum 2 is 0.30 m. or more lower than any of the other floor levels in Area C. Digging was insufficient to determine ground level to the north of the structure in this phase and whether there was a step down.

Stratum 3, which contained a considerable number of sherds and several other objects, represents the floor deposit dating to the first phase; it may have accumulated fairly rapidly, to judge by the absence of fine layering within it. Stratum 3 appears to pass beneath Walls BB and CC.

Walls BB and CC were built in the second phase. The other walls continued in use, and a small structure, probably rectangular, was thus formed; L. (N–S) at least 2.00 m., W. 2.05 m. The south wall is missing and has probably been lost through erosion. The door at the north side continued in use (W. 0.85 m.). Although Wall CC projects slightly to the west beyond Wall BB, there was no evidence to suggest that there was a second room or structure to the east.

Stratum 4 represents a floor deposit dating to the second phase. The earth was lighter in color in Stratum 4 than in Stratum 3 and contained somewhat fewer sherds. Stratum 5, immediately above Stratum 4, contained fragments of many tiles, which had evidently fallen when the roof of the second phase collapsed; other fallen tiles also extended over a considerable area to the north of Room 7 (Pl. 8:e).

The east side of Water Channel 6 leading southward from “Courtyard” 5 abuts the west end of Wall Y; the water channel may have been intended to direct water from Room 7 (see above). Since the water channel is at a relatively high level (Pl. 8:e), it is probably contemporary with the second phase of Room 7.

Walls X and Y are preserved to a greater height than any other Classical walls on the top of the hill; Y stands to a height of *ca.* 0.60 m. The finds from Room 7 did not show any discernible change or development from stratum to stratum.

Stratum 1. No significant stratified objects.

Stratum 4. No significant stratified objects.

Stratum 2. Uncatalogued: TC spoollike weight (AO.507, of Type 2 A).

Stratum 5. TC: tile (**D165**). Pottery: skyphos (**D190**).

Stratum 3. Lead: clamp (**D30**).

WELL 8 (Fig. 5:c, Pl. 8:b)

Circular shaft with depth of about 9.25 m.; D. at top 0.95 m.; at bottom 1.10 m. The upper 0.90–0.95 m. of the shaft was lined with a circular stone construction (Pl. 8:b), which increases slightly in diameter from top to bottom (see Fig. 5:c). The rest of the shaft is unlined and shows some signs of ancient deterioration and breakdown; its average diameter is *ca.* 1.20 m.

The uppermost 2.2 m. of the unlined part of the shaft passes through a geological layer of water-worn stones and pebbles; beneath this the shaft passes through a deposit of fine clay. The geological formation leads to the entrapment of ground water above the clay deposit, and the lower part of the well acts as a reservoir where the water could collect; cf. the well of the Geometric period (Part B above). After clearing, the well again began to collect water, even though it was August.

A layer at the bottom, *ca.* 0.25 m. deep, containing several nearly complete vessels, probably dates to the time of use of the well. The rest of the shaft had been filled in with debris, including 85 baskets of tiles, a number of stones, both small and large, a considerable quantity of coarse pottery, and a few pieces of fine pottery. Fragments of the same pots were widely scattered throughout the filling, which strongly suggests that it was all deposited at one time. The filling contained nothing which can be dated later than the period of Classical occupation at Armatova. Probably the well was deliberately filled, possibly because the shaft was becoming undermined; this filling almost certainly took place before the abandonment of the Classical settlement.

Use deposit (lowest 0.25 m.). Pottery: amphora (**D212**); large oinochoe (**D215**); small oinochoe (**D216**). Uncatalogued: four TC spoollike weights (including AO.404, AO.405, and AO.408, all of Type 2 A).

Filling. TC: figurine (**D79**); spoollike weight (**D118**); plaque (**D142**); roof tiles (**D143**, **D145–D158**, **D160**, **D167**; see discussion immediately below). Pottery: small handleless bowl (**D174**); skyphoi (**D191**, **D192**); amphora (**D213**); kraters (**D238**, **D245**, **D246**); plates (**D254–D257**); closed vessels (**D258**, **D259**); coarse amphorae (**D287–D293**); coarse jars (**D296**, **D297**); coarse basin (**D299**); large coarse lids (**D307**, **D308**); coarse stands (**D309–D313**). Uncatalogued: three TC spoollike weights (AO.62, AO.69, AO.222, all of Type 2 A).

Terracotta roof tiles from filling: 85 baskets of fragments. Probably already fragmentary when thrown in, to judge by the worn edges at breaks and the fact that not a single whole tile could be reconstructed. All the tiles, with three exceptions (see below), are of Laconian type. Pans are about 0.40 m. in width; covers apparently vary from about 0.25 to 0.30 m. in width. Both tend to narrow slightly towards one end. In no case could length be determined. Thickness varies considerably, from 0.013 to

0.025 m., but most are about 0.020 m. thick. The fabric is fairly fine, well fired, and light red to light red brown in color. Two or three tiles near the bottom of the well showed signs of intense burning. The upper surfaces were covered with a thin glaze, usually red brown but sometimes black. The complete profile of only three tiles was recovered, one pan (**D143**) and two covers (e.g. **D160**). There were often shallow grooves or recesses on the concave side of pan tiles, near the top or bottom edge and parallel to it (e.g. **D145–D150**); their purpose was presumably to provide a bedding or setting line for the next tile. One fragment (**D151**) has a bored hole near one end. The edge of one tile (**D152**) has fine parallel grooves, presumably the impression of a surface on which it was set to dry. Six fragments had various other markings made before firing: **D153**, **D154**, (both grooved designs); **D155** (circular impression, *D. ca.* 0.10 m.; from the base of a pot?); **D156** (human footprint); **D157**, **D158** (dog footprints). The fragments, despite their large number, do not necessarily represent more than about 200 tiles, and it is possible that all came from a single building.

Three fragments are from tiles of other types: **D167** is an angular ridge tile; two uncatalogued pieces are from flat pans, presumably of Corinthian type (cf. **D164–D166**).

HOUSE B (ROOMS 9–11)

House with at least three rooms, aligned roughly east–west. Only partly excavated and badly disturbed by plowing; north side almost completely missing.

ROOM 9

All but southeast corner missing. Probable doorway through Wall K about 0.95 m. north of its juncture with Wall J (*W. ca.* 1.0 m.?) communicating with Room 10. A gap in

Wall J immediately to the west of Wall K is probably the result of damage, since it appears too narrow to be a doorway (W. *ca.* 0.75 m.).

Room 10

Evidently rectangular. Central part unexcavated. North wall either missing or beyond the excavated space. Since the east wall continues about 6.5 m. without sign of a corner, it is most likely that the north wall has disappeared and that there was another room adjacent to Room 10 at the north. L. (E–W) 2.8 m. Probable doorway communicating with Room 9 (see p. 86 above). Probably another doorway through Wall H, about 2.0 m. north of its juncture with Wall J, communicating with Room 11.

Room 11

Also evidently rectangular. North wall missing. L. (E–W) *ca.* 2.55 m. Of lighter construction than Rooms 9 and 10 and perhaps added later since Wall L abuts rather than bonds with the corner of Walls H and J. Probable doorway communicating with Room 10 (see above). Perhaps another leading east through Wall M about 1.6 m. north of its juncture with Wall L.

No significant stratified finds were made in Rooms 9–11.

HOUSE C (ROOMS 12, 13)

House with two rooms, aligned north-northeast–south-southwest (north–south for purposes of the following description). The southernmost three fifths of Room 12 was cleared in 1964 by Themelis (1965, p. 217, no. 10).

Room 12 (Pl. 8:d)

Rectangular; well preserved except at southeast corner, where the walls are partly missing. L. (E–W) 4.6 m., W. 4.55 m. Probable doorway through Wall B near southeast corner; no evidence of any other doorway. Large stone resting on floor beside west wall (shown in the plan, Fig. 3) probably used as a seat or working surface. A large fragment of a Corinthian pan tile (**D166**) resting at or near the floor about 0.45 m. from the west wall and 1.6 m. from the north wall was probably *in situ* and used as a working surface (cf. **D164**, found in Area C, Structure 2). Four fragments of Laconian-type tiles with recoverable dimensions which had presumably fallen when the roof collapsed are catalogued below (**D144**, **D161–D163**).

Lead: weight? (**D26**). TC: spoollike weights (**D107**, **D117**); tiles (**D144**, **D161–D163**, **D166**). Pottery: lekythos (**D236**). Uncatalogued: two TC spoollike weights (AO.182, of Type 2 A; AO.134, of Type 3, oval seal impression on one end).

Room 13

Rectangular; east wall and northeast corner partly missing. L. (E–W) 4.45 m., W. 3.8 m. Of lighter construction and not perfectly aligned with Room 12; perhaps added later since the east wall (G) abuts rather than bonds with the northeast corner of Room 12. Doorway (W. 1.35 m.) at southwest corner; a slight setback in the north face of Wall D beside the doorway is probably to accommodate a wooden jamb. Doorway (W. 1.10 m.) through Wall F at northeast corner; a large stone at the west side of the opening is part of the threshold.

TC: loomweight (**D99**); spoollike weight (**D141**).

Uncatalogued: one TC spoollike weight (AO.39, of Type 1 B, badly chipped).

HOUSE D (ROOM 14 AND PROBABLY OTHERS)

Partly excavated house comprising one or more rooms. Room 14 roughly rectangular; L. 4.6 m., W. 2.8 m. There was probably a second room to the east, a third room to the south (partly missing), and possibly a fourth to the west.

Room 14. TC: spoollike weight (**D112**). Uncatalogued: three spoollike weights (including AO.474, of Type 2 A; AO.468, of Type 3).

UNSTRATIFIED

The following Classical objects were found in Area C near the surface or in trenches outside the excavated structures. A few objects of chipped stone, probably Middle Helladic, were also found in these contexts (see pp. 15–17 and **A52** above). The trenches mentioned below are shown on Map 4.

Lead: clamp (**D31**, near surface between Rooms 11 and 13). Iron: nail (**D57**, near northeast corner of Room 13); unidentified objects (**D61**, near surface at north side of Room 10; **D66**, to west of Room 13; **D67**, **D70**, both near surface between Rooms 11 and 13). Bone: bead (**D77**, near surface in Trench C24). TC: lamps (**D84**, to west of Room 11; **D85**, near surface above south side of Rooms 3 and 4; **D94**, near surface in Trench C10); spoollike weights (**D116**, near surface to west of Room 12; **D135**, near surface in Trench C13); unidentified object (**D171**, near

surface to north of Room 3). Pottery: cups or small bowls (**D207**, to west of Room 7; **D208**, near surface above south wall of Room 3; **D209**, near surface above northwest corner of Room 12); lekythos (**D227**, near surface in Trench C13); krater (**D244**, near surface above Structure 2); plates (**D250**, near surface in Trench C13; **D251**, near surface to west of Room 12; **D253**, near surface above Room 14); coarse basin (**D301**, near surface above south side of Rooms 3 and 4).

3. AREAS A, D, AND G

These three Areas on the top of the hill Armatova were of large extent and, for the most part, were investigated only by means of fairly widely spaced test trenches. Finds of periods other than the Classical (except for the inscribed jar of Archaic date from Area D, Trench 3)

are discussed elsewhere: see Part A for Middle Helladic remains in Area A; Part G for graves of relatively late date, probably Byzantine, in Area A (Fig. 1); and Part F for Byzantine or Frankish remains in Area D. Objects of Classical date turned up in almost every trench in these Areas, and only the most interesting are included in the catalogue. For the findspots given below, see Map 4.

Area A, Trench A9. Bronze: earring (**D18**). Pottery: small, handleless bowl (**D173**); squat lekythos (**D224**).

Trench A11. TC: figurines (**D80**, **D81**).

Area D, Trench D3. Lead: unidentified object (**D36**). Iron: door latch (?) (**D45**). Pottery: inscribed jar (**D314**; Archaic).

Trench D9. Bone or ivory: pin (**D76**).

Trench D12. Bronze: fragment of vessel(?) (**D13**); peg (**D14**); ornament (**D20**).

Trench D13. Bronze: earring (**D17**). Pottery: squat lekythos (**D219**); tall lekythoi (**D230**, **D235**).

Area G. Nothing included in catalogue.

4. AREA F 4

Area F 4 was located in the fields to the northeast of the hill (Maps 2, 3, Fig. 4) immediately to the southeast of the cemetery of the Roman period (Area F 2; see Part E, 2). The topography of these fields has already been described in general terms (see above, pp. 4, 5). Our initial test trenches in Area F 4 led to further investigation of two structures of the Classical period, a house and a well. The remains of both were first encountered immediately beneath the disturbed surface layer of cultivated earth.

HOUSE (Ill. 16, Pl. 9:a).

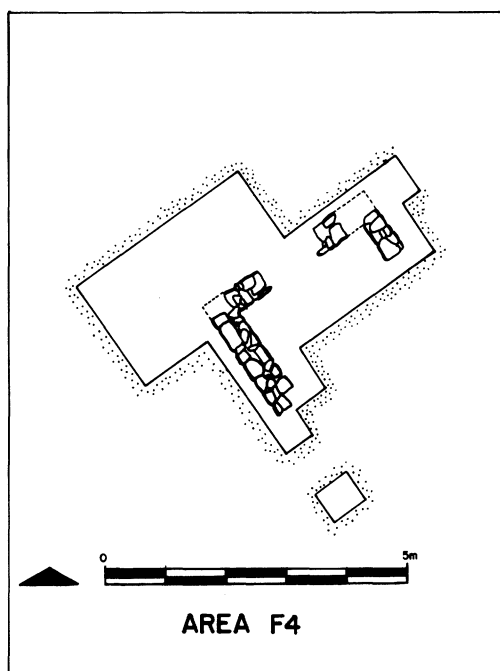
Fragmentary and only partly investigated. Located in Trench F16 (Map 3). Stone socles preserved to a height of *ca.* 0.30 m. Three walls of a single room, apparently rectangular; L. (NE–SW) 2.45 m., W. at least 1.75 m. Probable doorway about the middle of the northwest wall. No other doorway recognized, but the other walls are incomplete. The pottery, a sample of which is shown as a group on Plate 47, suggests that the house may date a little earlier than the other Classical remains excavated at Armatova (see comparisons cited in catalogue), and it can probably be assigned to the second half of the 5th century B.C. A few Archaic sherds were found in and around the houses, but virgin soil was encountered almost immediately beneath the walls, and there was no substantial deposit of earlier date.

Stratified. Pottery: ring foot, probably of skyphos (**D264**); shallow bowl (**D265**); plate (**D266**). Uncatalogued: fragment of bronze, perhaps part of attachment of a vessel (AO.539).

Unstratified surface find. TC spoollike weight (**D106**).

WELL (Fig. 5: d, Pl. 9:b)

Located in Trench F15 (Map 3) about 25.0 m. to the southeast of the preceding house. Lined from top to bottom with a well-built wall of unworked stones. W. at top *ca.* 1.0 m.;



ILL. 16. Plan of house in Area F 4

narrowing slightly at bottom. Depth at least 7.2 m. Water rose so rapidly during excavation that it was impossible to determine the depth with complete accuracy or to excavate the well completely to the bottom. The lowest 0.30 contained fragments of several semicoarse closed vessels, presumably water jars (none could be reconstructed) which probably found their way into the well while it was in use. The rest of the shaft was filled in with debris comprising earth with many stones (up to 0.60 m. in length), many fragments of terracotta roof tiles and a considerable number of sherds, mainly from large, coarse vessels. The tiles and the sherds were very fragmentary, and the debris recalls that found in the well in Area C (see p. 86 above).

The catalogue of pottery includes four pieces of special interest (**D199**, **D214**, **D267**, **D268**) and eight other sherds which are representative of the deposit as a whole (**D269–D276**; illustrated as a group on Plate 47). Most of the pottery may be dated to the late 5th and early 4th centuries B.C. The well probably went out of use and was filled in during the first third of the 4th century B.C., to judge by **D199** and **D214**, the latest of the pieces which may be dated with any confidence. The filling also contained a significant number of Archaic sherds (e.g. **D267–D271**) which probably derive from a settlement of that date in the general vicinity (cf. Part C above and the Archaic sherds found in the house in Area F 4, p. 89 above).

Of the objects listed below, only **D199** was found in the lowest 0.30 m.

Bronze: unidentified object (**D22**). Lead: sheet (**D35**). Pottery: stemmed cup (**D199**); red-figured pelike (**D214**); basins (**D267**, **D268**); eight other

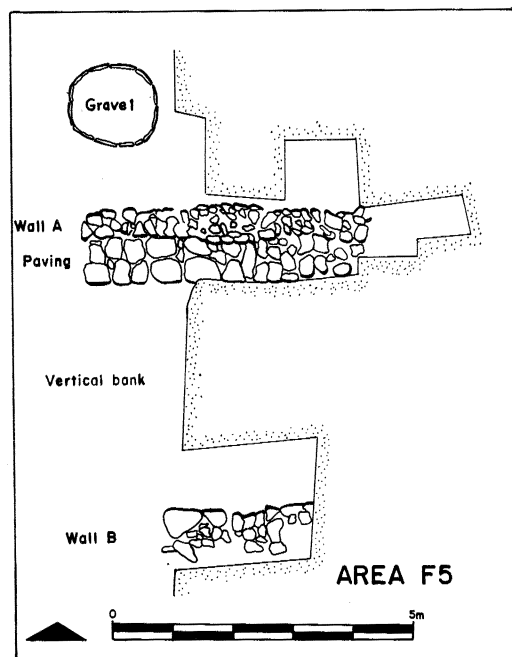
sherds (**D269–D276**). Uncatalogued: one TC loom-weight (AO.527); one TC spoollike weight (AO.500, of Type 2 A).

5. AREA F 5

Area F 5 is located to the northeast of Armatova hill about 80 meters north of Area F 3 (Map 3). Classical remains were exposed by erosion caused by an offshoot of the Peneios River (marked "stream" on Map 3; cf. Map 2), the east side of which forms a vertical bank *ca.* 2.5 to 3.0 m. high (Pl. 9:d). The remains were not fully explored, since they came to our attention only in 1970, after completion of the main excavation. They include two well-preserved house walls and a pithos burial.

HOUSE (Ill. 17; Pl. 9:c, d)

Wall A, aligned roughly east-west, stands to a maximum of *ca.* 0.60 m. At its foot on the south side is a paving of fairly large flat stones which extends *ca.* 0.75 m. south of the south face of Wall A (Pl. 9:c). Wall B is *ca.* 4.4 m. south of and parallel to Wall A, and its bottom is at roughly the same level. The deposit between the walls, where it was explored, contained many tiles and much domestic debris; it is therefore reasonable to assume that the walls belong to the same room. The other limits of the room were not determined: to the west the evidence is lost through erosion, and to the east the remains were not fully explored. It is possible that Wall A extended further to the east than is shown on the plan (Ill. 17). All the objects listed below were found in stratified contexts between Walls A and B except



ILL. 17. Plan of house in Area F 5

D277 and **D279**, which came from near the surface. The pottery can be dated to the late 5th and early 4th centuries B.C.

Iron: nail (**D46**); rod (**D74**). TC: lamp (**D89**); spool-like weights (**D113**, **D137**). Pottery: ten representative sherds (**D277–D286**; illustrated as a group on

Pl. 47). Uncatalogued: one TC spoollike weight (AO.533, of Type 1 A, chipped and worn).

GRAVE 1 (Pl. 9:d, e)

Large pithos about one meter to the north of Wall A of the preceding house; placed on side with mouth toward east-southeast. Partly exposed and damaged by erosion; about one third preserved in original position (fragments of the rest were found near by); bottom missing; mouth collapsed. L. pres. 1.45 m., W. pres. 1.35 m. Rim flat on top, flaring toward the outside; body probably ovoid (H. with rim est. 1.70 m., max. W. est. 1.52 m., D. rim 0.40 m.). The pithos had been broken in antiquity and mended with many lead clamps, one of which is included in the catalogue (**D28**). A few bones, probably those of a child, and the offerings listed below were found, in no orderly arrangement, near the bottom of the preserved part of the pithos (cf. Pl. 9:e).

The burial probably dates to a time after the near-by house went out of use and ground level had risen: the lowest point of the pithos was only about 0.30 m. to 0.40 m. beneath the level of the bottom of Wall A, and its highest point would originally have been about 0.75 m. above the lowest floor deposit in the house. None of the offerings were necessarily manufactured later than the first quarter of the 4th century B.C. (although the actual burial, of course, might have been somewhat later). Similar pithos burials are known at Elis (e.g., Papathanasopoulos, 1969, pl. 149:*a*, *β*).

Bronze: mirror (**D15**). TC: lamp (**D83**). Pottery: small handleless bowl (**D177**); small one-handled bowl (**D184**); red-figured lekythos (**D218**); black-

glazed lekythos (**D220**). Uncatalogued: tiny fragments of a disintegrated bronze ornament; two tiny flecks of gold.

6. AREA K

Area K is located at the foot of the hill now called "Kremilas", about 400 meters southeast of the hill Armatova and 300 meters west of the village of Agrapidochori (Map 2). The remains of a pithos-burial (Grave 2) were partly exposed in the middle of a modern cart track leading westward from Agrapidochori. Immediately to the west of Grave 2 we noted evidence of a second, tile-covered grave (visible in Pl. 9:f), too disturbed to warrant detailed description. A pithos-grave excavated by Themelis (1965, p. 218, no. 19) may have been near by; he dated it to the beginning of the 5th century B.C., but it is perhaps better dated later in the century or in the early 4th century B.C.

GRAVE 2 (Pl. 9:f)

Large pithos, placed on side with mouth (now missing) toward the east. Severely damaged; only about one-third preserved. L. pres. 1.62 m., W. pres. 1.02 m. Base comprising a projecting toe, flat beneath (with D. ca. 0.007 m.); body probably ovoid (H. without rim est. 1.65 m.). The two offerings found, listed below, were near the north side; the bowl (**D176**) was upside down. A few small bones (of a child?) were also found, in no discernible order.

The bowl **D176** was manufactured in the late 5th century or the early 4th century B.C.; the grave presumably dates to the same period.

Amber(?): bead (**D75**). Pottery: small, handleless bowl (**D176**).

CATALOGUE

This catalogue includes the most important movable finds from the contexts discussed above. Objects from stratified contexts in Areas B-E, Area C, Area F 4, and Area F 5 may be assumed to be Classical and to date from the last quarter of the 5th century or the first third of the 4th century B.C. unless otherwise noted. Except where indicated, objects from other contexts were included because they are likely also to be Classical; it should be noted, however, that the evidence for their date is less certain. Those pieces which are least certainly Classical are so indicated.

COINS, Pl. 54

SILVER

D1 (AO.481). C, Structure 2. Drachm of Elis, ca. 385–365 B.C. ↗ Obverse: [F–A] head of Hera right, wearing triangle-shaped beaded earrings and stephanos with palmette in front, inscribed HPA. Reverse [F–A] eagle with spread wings left, head turned right, surrounded by a circle of dots. The obverse die is the same as that which was noted by Seltman (1921, pl. XII:8) and Gardner and Poole (1887, p. 68, no. 91), although the reverses differ.

D2 (AO.486). C, Water Channel 6. Obol of Elis, 4th century B.C. ↗ Edges worn. Obverse: female head (Hera or Olympia) right, wearing diadem and earring; to left traces F. Reverse: F–A winged thunderbolt. Cf. Forrer, 1924, no. 4067. Seltman (1921, pp. 100–105) argued that coins with heads of this type dated later than the Arcadian occupation of the Altis at Olympia in 365–363 B.C. The provenance of our example suggests that they might have been struck first a few years earlier. Other-

wise, if the date suggested above (p. 68) on historical grounds for the abandonment of the Classical settlement on the hilltop is correct, this coin must be regarded as a stray.

D3 (AO.506). C, Structure 2. Hemiobol of Orchomenos (Boiotia), ca. 387–374 B.C. ✓ Obverse: sprouting grain of wheat. Reverse: traces E–P; ear of wheat. Cf. Grose, 1923–1929, II, no. 5540; *SNGCop*, Aitolia–Euboia, no. 203.

D4 (AO.30). B-E, Unstratified. Aeginetan stater, ca. 510–480 B.C. ↗ Obverse: turtle of “heavy collar” type, struck off center; row of worn dots, probably five, on back. Reverse: incuse with five sunken segments. The “heavy collar” type of turtle was first defined by Holloway (1971, pp. 7–9). The dating given above corresponds to the suggestions of Price and Waggoner (1975, p. 76) on the basis of the “Asyut” hoard from Lower Egypt. Our coin corresponds most closely with their Group III (pp. 69–70): for the obverse cf. nos. 466–477; for the reverse

cf. no. 451. Joan Fisher comments (letter of May 13, 1981): "Note that your reverse is also similar to two ANS specimens, Newell 11.82 gr. and Hoyt Miller Bequest 11.59 gr. These two staters bear (on Obv.) turtles with somewhat thinner collars than yours, but not very thin as Asyut 451."

BRONZE

D5 (AO.424). B-E, Courtyard 12. Achaean League,

ca. 370–360 B.C. ↑ Badly corroded and worn. Obverse: head of Zeus right, laureate. Reverse: Λ in laurel wreath; perhaps other markings in field. Cf. Grose, 1923–1929, II, p. 410, nos. 6354–6356; *SNGCop*, Phliasia-Laonia, nos. 228, 229.

D6 (AO.484). B-E, Courtyard 12. Unidentified Greek, badly corroded and worn. Obverse: head right. Reverse: illegible.

BRONZE

FRAGMENTS PROBABLY FROM VESSELS OR CONTAINERS

D7 (AO.367). Pl. 37:b. B-E, House B, Courtyard 12. Strip, nearly triangular in section, probably part of rim; W. (at top) 0.005; a groove on one side evidently marked off the rim from the vessel wall.

D8 (AO.323). Pl. 37:b. Found near **D7** and similar to it (from the same vessel?).

D9 (AO.126). Pl. 37:c. B-E, Courtyard 30. Fragment of curving rod. D. 0.006. Probably part of handle.

D10 (AO.356). Pl. 37:c. B-E, House C, Room 17. Fragment like preceding. D. 0.006–0.008.

D11 (AO.357). Pl. 37:c. B-E, House C, Room 17. Curving rod. D. 0.006. Conical knob at one end; the other end broken. Pail handle?

D12 (AO.430). Pl. 37:f. B-E, House C, Room 17. Attachment. Nearly intact. L. 0.046, Th. 0.003. Roughly semicircular with flange at the top; pierced twice. The curvature suggests that it was attached to the inside of a shallow vessel at the rim.

D13 (AO.429). Pl. 37:f. D, Trench 12. Flat piece with patch on underside. L. pres. 0.042, Th. 0.002. Patch attached with eight rivets. Possibly not Classical.

D14 (AO.202). Pl. 37:c. D, Trench 12. Peg or nail. L. 0.033. Shaft roughly square in section.

MIRROR, Pl. 37:e

D15 (AO.544). F 5, Grave 1. Roughly circular. D. pres. 0.009, Th. 0.001.

SEAL RING, Pl. 37:h

D16 (AO.218). B-E, Unstratified. Oval bezel, L. 0.02, W. 0.015. Chipped; most of ring proper missing. Made in a single piece. Design in intaglio (described as seen in the impression, Pl. 37): Herakles wrestling with Nemean lion. Herakles, with body bent, at left; right leg flexed, left leg extended; head, with curly hair and beard, frontal; arms apparently wrapped around lion's head. Lion right; hind legs braced with tail between them; head obscured by Herakles. Herakles' club is shown behind him.

Similar versions of this design are known from engraved gems of the late 5th and early 4th centuries B.C. One, in New York (Boardman, 1970, pl. 528), which is thought to have been inspired by or to be related to Syracusan coins by Euainetos (e.g. Kraay and Hirmer, 1966, nos. 127, 129, dated to *ca.* 390–380 B.C.), is closely similar in composition (e.g. Herakles' head frontal, left leg extended), although not in all details (the lion's hind legs on the New York gem are in front of and partly obscure Herakles' left leg). The artistic quality of our piece is considerably lower. For the position of Herakles' left leg and the lion's hind legs, cf. also a gem in Paris, which, however, has the scene reversed from right to left (Boardman, 1970, pl. 536).

PERSONAL ORNAMENTS, Pl. 37:g

D17 (AO.434). D, Trench 13, Unstratified (see below, p. 144). Earring. Rod, D. 0.005, in the form of an open ring, D. 0.023. Overlapping ends terminate in spheres attached to rectangular pyramids with four stages. Four raised bands on rod near each end.

Cf. **D18** and **E5**; cf. also Curtius and Adler, 1890, no. 1156, a type described (p. 185) as "*ziemlich häufig*" at Olympia, and considered (p. 184) to be one of a number of types of earrings which "*gehören alle guter griechischer Zeit.*" Our examples cannot be securely dated and are possibly not Classical.

D18 (AO.25). A, Trench 9. Earring like **D17**. D. 0.027, D. rod 0.006. Ends and four raised bands like **D17** but decorated with incision. Incised chevrons on rod near raised bands. Cf. **E5**. Possibly not Classical.

D19 (AO.494). B-E, Place of Domestic Activity 29. Strip, diamond-shaped in section, bent into an open circle, D. 0.047. One end missing; the other turns back to form a loop. Non-joining pieces found together with **D19** and possibly belonging: two pieces of bronze wire (to the left in Pl. 37:g) and a bronze loop in which was originally inserted a tiny ball on a stem (to the right in Pl. 37:g). Bracelet?

D20 (AO.290). D, Trench 12. Pointed ornament with two swellings. Broken at one end. L. pres. 0.028. Incised decoration: ribs on lower swelling, rings on upper. Possibly not Classical.

D21 (AO.455). B-E, House B, Courtyard 12. Fragment, broken at all edges; L. pres. 0.011, Th. 0.002. Tiny piece of gold inlay near one edge.

OTHER, Pl. 37:b

D22 (AO.302). F 4, Well. Object rectangular in section, broadening toward one end and with a small round tang at the other. L. 0.031.

D23 (AO.412). B-E, Place of Domestic Activity 29. Thin, flat object with a tang at one end, perhaps originally pointed at the other. L. pres. 0.022.

D24 (AO.14). B-E, Unstratified. Long, narrow object, probably broken at both ends; L. pres. 0.031. Flattened at one end; nearly rectangular at the other.

LEAD

WEIGHTS, Pl. 37:d

D25 (AO.306). B-E, House B, Courtyard 12. Thin, oval piece. L. 0.084, Th. 0.009. Flat on one side, convex on the other.

D26 (AO.41). C, House C, Room 12. Thin, oblong piece. L. 0.048, Th. 0.003. Markings (which may or may not be intentional): three incised strokes on one side; two incisions or gashes at one edge, one at the other edge.

D27 (AO.503). C, Water Channel 6. Disklike. L. 0.021, Th. 0.007. Two gashes, perhaps intentional, near one edge.

CLAMPS FOR POTTERY, Pl. 37:d

D28 (AO.541). F 5, Grave; the best preserved of many which were used to mend the burial pithos. L. 0.115, W. (entire) 0.045, W. (of side piece) 0.015. Two connecting pieces at one end.

D29 (AO.211). B-E, House C, Room 16. One side piece, folded into loop. L. pres. 0.035, Th. 0.006.

D30 (AO.504). C, House C, Room 7. Side piece with one connecting piece preserved. Folded up;

large lump attached near middle, as if miscast. L. pres. 0.037.

D31 (AO.44). C, Unstratified. Fragment of side piece with large connecting piece attached. L. pres. 0.03.

D32 (AO.361). C, Water Channel 6. Two fragmentary side pieces and connecting piece. L. pres. 0.042.

D33 (AO.251). B-E, Unstratified. Fragment of side piece with connecting piece. L. (side piece) 0.036.

D34 (AO.324). B-E, House B, Courtyard 12. Side pieces broken at one end. L. pres. 0.051. One side piece, presumably that originally on the outside of the vessel, projects beyond the other at the preserved end.

OTHER

D35 (AO.303). Pl. 37:a. F 4, Well. Irregular piece of sheet. L. pres. 0.039, Th. 0.001.

D36 (AO.78). Pl. 37:f. D, Trench 3. Rectangular bar, broken at one end. L. pres. 0.042. Rounded and smooth on all except lower surface, which is rough. Possibly not Classical.

IRON

All the objects are corroded, some very severely.

ARROWHEADS, Pl. 38

All have pyramidal points and round tangs. All, except possibly **D39**, are fragmentary.

D37 (AO.305). B-E, Courtyard 27. L. pres. 0.076.

D38 (AO.301). B-E, Place of Domestic Activity 29. L. pres. 0.064.

D39 (AO.372). C, House A, Room 4. L. 0.09.

D40 (AO.433). B-E, House B, Courtyard 12. L. pres. 0.042.

D41 (AO.384). B-E, House B, Courtyard 12. L. pres. 0.056.

D42 (AO.298). B-E, House C, Room 14. L. pres. 0.041.

SPEARHEAD(?), Pl. 38

D43 (AO.304). B-E, House B, Room 5. Broken at both ends. L. pres. 0.045. Part of a hole or bifurcation is preserved at lower end.

DOOR LATCHES (?)

D44 (AO.269). Pl. 38. B-E, Courtyard 27. Intact. L. 0.081, W. (head) 0.028. Tapering shaft, square to rectangular in section, with a round, flat head.

D45 (AO.108). Pl. 38. D, Trench 3. Intact. L. 0.072, W. 0.029. Tapering shaft, rectangular in section with a flat, roughly oval head, asymmetrically attached.

NAILS AND SPIKES

Many of those found within houses may have served to attach roof timbers. Almost all are fragmentary. The shafts are frequently rectangular or round in section. The heads, which are all round, are sometimes situated off center.

D46 (AO.530). Pl. 38. F 5, House. L. pres. 0.055. Shaft rectangular in section.

D47 (AO.366). Pl. 38. B-E, Place of Domestic Activity 29. L. pres. 0.063. Shaft round in section.

D48 (AO.391). Pl. 38. B-E, House B, Courtyard 12. Bent at right angle. L. (if straightened) 0.10. Shaft square in section.

D49 (AO.24). Pl. 38. B-E, Unstratified. L. pres. 0.029. Shaft possibly round in section.

D50 (AO.11). Pl. 38. B-E, Unstratified. L. pres. 0.016. Shaft rectangular in section.

D51 (AO.414). Pl. 38. B-E, House B, Courtyard 12. Bent at right angle. L. pres. (if straightened) 0.110.

D52 (AO.268). Pl. 38. B-E, House B, Courtyard 12. L. pres. 0.095. Shaft square in section.

D53 (AO.398). Pl. 38. B-E, House B, Courtyard 12. L. pres. 0.081. Shaft probably square in section.

D54 (AO.370). Pl. 38. C, House A, Room 4. L. pres. 0.102. Shaft square in section.

D55 (AO.397). Pl. 38. B-E, House B, Courtyard 12. L. pres. 0.064.

D56 (AO.493). Pl. 38. B-E, Place of Domestic Activity 29. L. pres. 0.113. Shaft rectangular in section, swelling toward head (of unusual type?).

D57 (AO.210). Pl. 38. C, Unstratified. L. pres. 0.018. Shaft round in section.

D58 (AO.10). Pl. 38. B-E, Unstratified. L. pres. 0.07. Shaft square in section.

D59 (AO.371). Pl. 38. C, Water Channel 6. L. pres. 0.088. Shaft square in section, bent toward point.

OTHER

D60 (AO.390). Pl. 38. B-E, House B, Courtyard 12. Iron hook, possibly part of nail. L. pres. 0.077.

D61 (AO.257). Pl. 38. C, Unstratified. Pin(?) with square shaft, bent in three places. L. pres. 0.07. Flattened, leaf-shaped head (not shown), extended in the same axis as the shaft.

D62 (AO.299). Pl. 38. B-E, House C, Room 15. Curving object, broken at both ends, possibly a strigil. L. pres. 0.056.

D63 (AO.537). Pl. 38. B-E, Unstratified. Shaft with flattened end, possibly a chisel. L. pres. 0.10.

D64 (AO.300). Pl. 38. B-E, House C, Room 19. Shaft, rectangular in section, with flattened end, possibly a chisel. L. pres. 0.059.

D65 (AO.396). Pl. 38. B-E, House B, Courtyard 12. Curving fragment, probably of a blade. L. pres. 0.064, W. (narrower, blade end) 0.011, W. (wider, handle end) 0.018.

D66 (AO.465). Pl. 38. C, Unstratified. Rectangular shaft with a roughly rectangular head at either end. L. 0.056, D. shaft 0.007. Probably a rivet or clamp.

D67 (AO.128). Pl. 38. C, Unstratified. Fragment of wire with corkscrew twist. L. pres. 0.038, D. 0.004.

D68 (AO.352). Pl. 38. B-E, House B, Courtyard 12.

Ring (mended from two pieces). D. 0.029, D. wire 0.005.

D69 (AO.204). Pl. 38. B-E, Courtyard 27. Cylinder. L. 0.022, D. 0.011.

D70 (AO.273). Pl. 38. C, Unstratified. Flat strip, bent up at either end. L. 0.076, W. 0.047, Th. 0.003.

D71 (AO.393). Pl. 38. B-E, House B, Courtyard 12. Flat sheet. L. pres. 0.054, Th. 0.003.

D72 (AO.286). Pl. 38. B-E, House B, Room 5. Roughly rectangular, flat piece, slightly concave, with notch at one end. L. 0.063, W. pres. 0.31, Th. 0.015.

D73 (AO.538). Pl. 38. B-E, Place of Domestic Activity 29. Fragment of rod. The one preserved end is slightly hooked. L. pres. 0.125. Handle of container?

D74 (AO.531). Pl. 38. F 5, House. Long fragment of rod. L. pres. 0.26.

AMBER(?), Pl. 41

D75 (AO.291). K, Grave 2. Bead. L. 0.012, W. 0.01, Th. 0.005. Scaraboid. Decoration, now illegible, possibly cut into upper surface.

IVORY OR BONE, Pl. 41

D76 (AO.84). D, Trench 9. Pin, handle, spoon, or the like. Missing one end. L. pres. 0.058. Narrower at head end and terminating in a rounded knob. Decorative rings and moldings on shaft. Possibly not Classical.

D77 (AO.292). C, Unstratified. Tiny pierced spherical bead of bone. D. 0.008. Possibly not Classical.

TERRACOTTA OTHER THAN POTTERY

The fabric of all the terracotta objects is fairly uniform and essentially similar to that of the pottery (see further under Spoollike Weights, p. 102).

FIGURINES, Pl. 41

All were made in molds.

D78 (AO.517). B-E, Place of Domestic Activity 29. Fragmentary female head. H. pres. 0.075, W. pres. 0.056. Hollow behind. Soft fabric, pink on outside, yellow on inside. Oval face with heavy mass of scroll-like hair, small closed mouth. Cf. **D81**.

D79 (AO.485). C, Well 8. Central part of a female figure, seated on a chair. H. pres. 0.062, W. pres. 0.058. Hollow behind. Worn. Soft, yellow-brown fabric. Figure facing right. Thin drapery on upper body, himation or overfall extending diagonally from left shoulder to right waist. Right arm bent; right hand holding a bird (head uppermost) by the wings. Elaborate decoration on chair, now illegible.

D80 (AO.98). A, Trench 11. Female head. H. pres. 0.063, W. pres. 0.054. Solid but unfinished behind. Neck broken but preserving part of a central depression (for dowel?). Pink clay. Oblong face. Large, spreading diadem resting on thick strands of hair, parted in middle and drawn to rear. Small mouth with straight, full lips. Close in style to heads from Period III (late 5th century or early 4th century B.C.) of the assembly place of the Pnyx in Athens; cf. Davidson and Thompson, 1943, no. 35 (especially for the diadem) and no. 50 (for the face).

D81 (AO.51). A, Trench 11. Fragmentary female head. H. pres. 0.046, W. pres. 0.037. Hollow behind. A vertical line beneath the nose is perhaps where two parts of the mold came together. Pink clay. Features like those of **D78** except mouth more pinched.

LAMPS

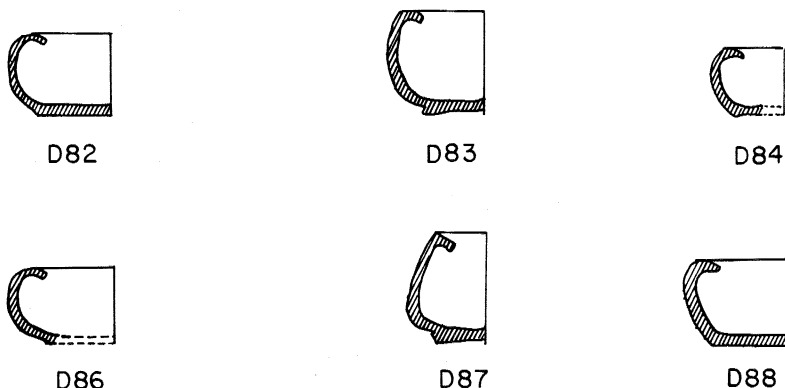
The clay is similar to that of the pottery. The surfaces are often worn, and many were probably more extensively glazed than now appears. Evidence for a handle was found in only one case (**D86**), but the material is fragmentary, and some of the others may also have had handles. Most are simple open receptacles with a body curving continuously to form an overlapping rim. Similar lamps are common at Olympia in the Classical period: cf. Eilmann, 1941, pp. 56–57 and figs. 59:a, 60, 61; Schiering, 1964, fig. 61, nos. 7–10; Gauer, 1975, fig. 31, nos. 17, 18. They fall within Corinth Type IV (Broneer, 1930, pp. 39–42) and Athens Type 21 (Howland, 1958, pp. 44–52). The Armatova lamps tend to be taller and more thinly walled, however, than their counterparts at Corinth and Athens, and the proportion with handles and raised bases appears to be lower. The nozzles are fairly long with the wick-holes placed well away from the rim; these are considered relatively late features at Corinth and Athens.

One lamp (**D89**), found in one of the houses in the fields northeast of the hill Armatova, is of a different type from the rest: taller and narrower, with a sagging body. The rim is set off at an angle. The parallels cited below suggest a date in the first half of the 4th century B.C.

The lamps discovered in the settlement on the top of the hill, which are all (including uncatalogued fragments) of the continuously curved type, may be dated by the comparisons already cited to the late 5th and early 4th centuries B.C., and they are entirely compatible with a date of about 365 B.C. for the abandonment of the settlement (see general discussion above, p. 68). Those from the houses below the hill, with the possible exception of **D89**, may also be dated before about 365 B.C. There is no evidence that any of the lamps had grooves around the perimeter of the rim, which is usually taken to be a feature of the advanced 4th century B.C.

D82 (AO.383). Ill. 18, Pl. 41. B-E, House C, Room 19. H. 0.026, D. 0.066. Body and rim in continuous curve; raised base. Traces of glaze on inside

and outside. Cf. Athens Type 21 C (Howland, 1958, pp. 48–49).



ILL. 18. Profiles of Classical lamps. Scale 2:5

D83 (AO.523). Ill. 18, Pl. 41, Grave 1. H. 0.035, D. 0.055. Body and rim in continuous curve but rim more hooked than preceding; raised base. Glazed inside and outside. Closest to Type 21 at Athens but with some similarities to Type 23 (Howland, 1958, pp. 56–62).

D84 (AO.513). Ill. 18, Pl. 41. C, Unstratified. Fragment of rounded body, slightly flaring. H. 0.021, D. est. 0.017. Flat bottom, slightly concave beneath.

D85 (AO.511). Pl. 41. C, Unstratified. Fragment of rounded body. H. 0.016. Raised base.

D86 (AO.540). Ill. 18, Pl. 41. B-E, Place of Domestic Activity 29. Fragment of rounded body. H. 0.025, D. 0.07. Raised base.

D87 (AO.514). Pl. 41. B-E, House C, Room 18. Fragment of rounded body. H. pres. 0.018, D. est. 0.06. Attachment of horizontal handle preserved.

D88 (AO.448). Ill. 18, Pl. 41. B-E, Unstratified. Fragment of rounded, somewhat flaring body. H. 0.028, D. 0.07.

D89 (AO.543). Ill. 18, Pl. 41. F 5, House. End of spout and part of body missing; partly restored. H. 0.032, D. 0.052. Tall body, flaring at bottom and narrowing toward top. Offset, flat, sloping rim. Raised base. Traces of glaze on exterior. Cf. Eilmann, 1941, fig. 59, d = fig. 63, left, Corinth

Type VI, no. 112 (Broneer, 1930, p. 140), and Athens Type 23 C Prime, no. 234 (Howland, 1958, pp. 60–61), all of which have more broadly based nozzles.

D90 (AO.470). Pl. 41. B-E, House B, Courtyard 12. Fragment of nozzle. L. pres. 0.046.

D91 (AO.394). Pl. 41. B-E, House A, Room 1. Fragment of nozzle and part of body. L. pres. 0.045.

D92 (AO.315). Pl. 41. B-E, House B, Room 5. Nozzle. L. pres. 0.04.

D93 (AO.23). Pl. 41. B-E, Unstratified. Fragment of nozzle. L. pres. 0.029.

D94 (AO.378). Pl. 41. C, Unstratified. Fragment of nozzle. L. pres. 0.031.

D95 (AO.395). Pl. 41. B-E, House A, Room 1. Fragment of nozzle and part of body. L. pres. 0.048.

LOOMWEIGHTS, Pl. 41

D96 (AO.231). B-E, House B, Room 8. Pyramidal. H. 0.072, bottom 0.038×0.037 .

D97 (AO.313). B-E, House B, Courtyard 12. Pyramidal. H. 0.077, bottom 0.037×0.034 .

D98 (AO.103). B-E, House B, Room 9. Pyramidal. H. 0.073, bottom 0.04×0.034 .

D99 (AO.35). C, House C, Room 13. Pyramidal. H. 0.078, bottom 0.049×0.046 .

D100 (AO.198). B-E, House B, Doorway between Rooms 8 and 9. Pyramidal. H. 0.072, bottom 0.038×0.039 .

D101 (AO.400). B-E, House B, Courtyard 12. Pyramidal. H. 0.074, bottom 0.039×0.036 .

D102 (AO.199). B-E, House B, Doorway between Rooms 8 and 9. Pyramidal. H. 0.079, bottom $0.05 \times$

0.05. Illegible seal impression near bottom on one of the perforated sides: oval, 0.015×0.011 .

D103 (AO.197). B-E, House B, Doorway between Rooms 8 and 9. Conical. H. 0.076, D. bottom 0.058. Illegible seal impression on side below perforation: oval, 0.018×0.012 .

D104 (AO.102). B-E, House B, Room 9. Conical but irregular. H. 0.062, D. bottom 0.053.

SPOOLLIKE WEIGHTS, Ill. 19, Pls. 39, 40

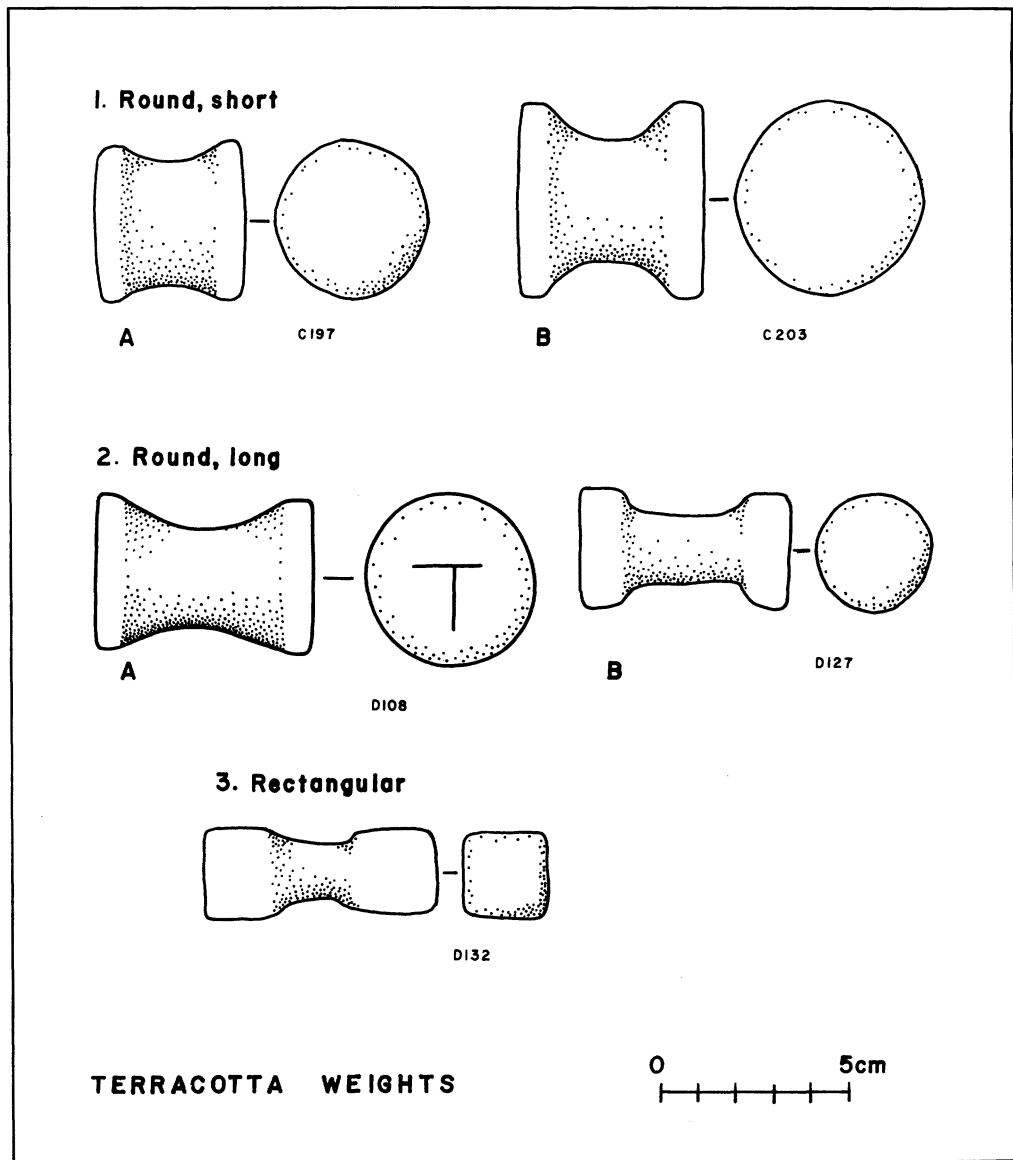
The small terracotta objects here called spoollike weights occurred in every Classical deposit. One hundred eighteen were described in detail in the excavation inventory, and many others in a fragmentary state were noted in the excavation daybooks. They thus provide by far the largest class of small objects from the site. A group of similar objects from the well of the Archaic period in Area F 2 (see above, **C196–C205**) are clearly predecessors of the Classical ones, although there are differences which make it possible to recognize an Archaic type (i.e. Type 1, pp. 62–63) as distinct from the Classical types (Types 2 and 3).

It is possible that spoollike weights went out of use after the Classical period. The few found in later or mixed contexts at Armatova seemed likely to have been strays from the earlier periods. It should be noted, however, that Armatova produced very little evidence of later habitation (but see Parts E and F below).

Thirty-seven of the best preserved and most characteristic examples are catalogued below. Almost all fall into two distinct types, Types 2 and 3 (Ill. 19). Those of Type 2 are round in section throughout and are considerably greater in length than in maximum diameter. The ends are generally flat but sometimes may be slightly convex, or more rarely, concave. Type 2 may be further divided into two subgroups (although it should be understood that there is no hard and fast division between them). The sides of those of Type 2 A have a more or less continuous curve, whereas the ends of those of Type 2 B (as seen in profile) are set off to some extent from the waist. Type 2 B is less common and comprises only about 15% of the spoollike weights of Type 2.

Those of Type 3 are rectangular or square in section at either end. The waists are only slight constrictions, usually more or less round in section, and form only a small part of the total length. Type 3 is considerably less frequent than Type 2 and comprises about 30% of the total number.

Spoollike weights of Type 1, as discussed in Part C, are limited almost exclusively to the Archaic well. Two, however, were found in Areas B-E, House B, Courtyard 12 (**D105** and AO.263) together with 16 other spoollike weights (see below); they may have been manufactured in the Archaic period and re-used, or possibly the manufacture of Type 1 continued sporadically in the Classical period. A few other examples of Type 1 found in or near Classical houses are perhaps strays which were not actually in use in the Classical period (those included in the catalogue or mentioned elsewhere in this report: **D106**, from a surface context; AO.39, from Area C, House C, Room 13, badly chipped; AO.533, from Area F 5, House, chipped and worn).



ILL. 19. Spoollike Weights

Roughly one third of the Classical spoollike weights have seal impressions or marks incised before firing (Pl. 40). These almost always occur on one end (exceptions: **D126**, **D128**, with impressions on each end; **D138**, with impressions on each end and one on waist). Most of the impressions are from oval seals which were probably similar to **D16**; the design can be made out in only a few cases (e.g. **D115**, **D136**). Others have circular impressions (e.g. **D138**). **D117** has an impression in the form of a palmette. The marks which occur almost all consist of lines meeting at a right angle.

Spoollike weights were clearly made locally. The fabric, usually reddish in color and fairly soft with many mineral inclusions, is closely similar to that of the pottery (see below, pp. 106–107).

The purpose of these objects is not clear. Types 1 and 2 are fairly well suited for the storage of thread, and it is possible that they were used as spools. Type 3, however, has a shorter waist which would have held fewer windings and would have been less efficient for thread. Since the waists could also have been used to tie all three types securely for suspension, it seems more likely to me that they were used as weights of some sort. Fish-nets might be appropriate as the weighted object, given the near-by rivers. The widespread distribution of spoollike weights would argue against such a use, however, unless we also postulate that fishing was a very common activity and that nets were often stored in houses when not in use. Perhaps they were used as loomweights, since loomweights of the more usual types (e.g. **D96–D104** above) are remarkably rare at the site and weaving would surely have been a frequent task in every home. If the spoollike weights were really loomweights, then we may suggest that a loom had been set up in Courtyard 12 of House B in Areas B-E (see description, p. 75 above), where a concentration of 18 of these objects were found together with a loomweight of more usual type. It is interesting to note that although more than half of the spoollike weights in this concentration were of Type 2 A, each of the other types was also represented.

Spoollike weights have been reported in such great quantities elsewhere, so far as I am aware, only at Olynthos, although they are known from several other sites. At Olynthos “more than 200” were found in the first season of excavation (Robinson, 1930, p. 128), all apparently of Classical date. Although they are described only in general terms, the 91 shown in a group photograph (*op. cit.*, fig. 296) appear without exception to belong to Type 2. I am not aware of any report of those found in later seasons at Olynthos, but presumably they continued to turn up in large numbers.

At least 24 were found in surface levels at Makryisia near Olympia (Papathanasopoulos, 1970, pl. 170:ε). Although they are not described in detail, two or three of those pictured are possibly of Type 1; all the rest are of Type 2. Other sites at which a few spoollike weights have been found include Olympia (Curtius and Adler, 1890, nos. 1327 and 1328, Type 1 B; no. 1329, apparently Type 3; no. 1330, Type 2 B, “*aus guter griechischer Zeit*,” with a seal impression on one end); Corinth (Davidson, 1952, no. 1279, Type 2 B, of the “fifth or fourth century B.C.”; no. 1280, Type 1 B, “probably fifth century B.C.”; no. 1281, also Type 1 B but with unusually narrow waist, of the “fifth or fourth century B.C.”), Perachora (Payne, 1940, no. 268 “and four others” Type 1 B, dated to the second half of the 6th century B.C.), Argos (Vollgraff, 1906, p. 37, fig. 61, Type 2 A, with the seal impression of a rosette; although it was found in a Bronze Age house, Vollgraff doubts its prehistoric date “*or, l’on sait que les Argiennes, à l’époque classique, se servaient encore de bobines de terre-cuite de forme identique*”), and Mycenae (Wace *et al.*, 1953, p. 79, no. 28, Type 1 b, mistakenly regarded as “probably L.H.”).

TYPE 1 A(?)

D105 (AO.322). Pl. 39. B-E, House B, Courtyard 12. L. 0.037, D. ends 0.044, 0.043, D. waist 0.034. Probably Type 1 A but one end fairly flat.

TYPE 1 B

D106 (AO.535). Pl. 40. F 4, House, Unstratified. L. 0.038, D. ends 0.038, D. waist 0.034. Small circular impression at one end; from seal, or part of manufacturing process?

TYPE 2 A

D107 (AO.460). Pl. 39. C, House C, Room 12. L. 0.053, D. ends 0.042, 0.041, D. waist 0.032. Two incised lines on one end, meeting at an acute angle.

D108 (AO.346). Ill. 19, Pls. 39, 40. B-E, House B, Courtyard 12. L. 0.058, D. ends 0.045, 0.043, D. waist 0.03. Nearly circular depression, perhaps deliberate, on one side near one end. Two incised lines on one end, meeting to form a T.

D109 (AO.341). Pls. 39, 40. Coleman, 1969, pl. 160:b, lower left. B-E, House B, Courtyard 12. L. 0.054, D. ends 0.039, 0.038, D. waist 0.024. Small impressions at one end forming a circle, D. 0.018; cf. **D113**.

D110 (AO.477). Pl. 39. B-E, Place of Domestic Activity 29. L. 0.049, D. ends 0.034, D. waist 0.018. Burned on one side.

D111 (AO.442). Pl. 39. B-E, Passageway 13. L. 0.043, D. ends 0.033, 0.032, D. waist 0.024. Oval seal impression, 0.014×0.011 , at one end, illegible.

D112 (AO.475). Pl. 39. C, House D, Room 14. L. 0.046, D. ends 0.034, D. waist 0.021. One end somewhat concave.

D113 (AO.532). Pl. 40. F 5, House. L. 0.045, D. ends 0.037, D. waist 0.028. Slightly concave at both ends. Many small impressions at one end forming an oval, 0.02×0.015 ; cf. **D109**.

D114 (AO.316). Pl. 40. B-E, House B, Courtyard 12. L. 0.048, D. ends 0.044, 0.042, D. waist 0.03. Oval seal impression, 0.02×0.012 , at one end, illegible.

D115 (AO.472). Pl. 40. B-E, Place of Domestic Activity 29. L. 0.045, D. ends 0.038, D. waist 0.023. Oval seal impression, 0.013×0.009 , at one end; four-footed animal moving right, carrying something in mouth; cf. uncatalogued spoollike weights from B-E, House B, Courtyard 12 (AO.385) and Courtyard 27 (AO.349).

D116 (AO.187). Pl. 40. C, Unstratified. L. 0.057, D. ends 0.034, D. waist 0.022. Two incised lines in the form of a cross at one end; cf. two uncatalogued spools from B-E, House B, Courtyard 12 (AO.342) and House C, Room 19 (AO.344).

D117 (AO.135). C, House C, Room 12. L. 0.055, D. ends 0.029, D. waist 0.017. Type 2 A, but with a suggestion of angularity. Seal impression in the form of a palmette at one end, 0.016×0.015 .

D118 (AO.194). Pl. 39. C, Well 8. L. 0.047, D. ends 0.045, D. waist 0.029. Unusually irregular.

D119 (AO.386). Pl. 39. C, Structure 2. L. 0.039, D. ends 0.036, D. waist 0.019. Unusually long waist and thin ends.

D120 (AO.416). Pl. 39. B-E, House A, Room 1. L. 0.031, D. ends 0.02, 0.019, D. waist 0.016. Unusually small.

TYPE 2 B

D121 (AO.411). Pl. 39. C, Structure 2. L. 0.062, D. ends 0.049, 0.047, D. waist 0.031.

D122 (AO.335). Pl. 39. B-E, House B, Courtyard 12. L. 0.054, D. ends 0.038, 0.037, D. waist 0.022. Oval seal impression, badly worn, at one end.

D123 (AO.471). Pls. 39, 40. B-E, House B, Room 4. L. 0.048, D. ends 0.032, 0.031, D. waist 0.021. Blackened from burning. Two incised lines in the form of a gamma on one end.

D124 (AO.399). Pl. 39. B-E, House B, Courtyard 12. L. 0.05, D. ends 0.035, D. waist 0.025. Somewhat blackened from burning.

D125 (AO.438). Pl. 39. B-E, House A, Room 1. L. 0.059, D. ends 0.039, 0.04, D. waist 0.028.

D126 (AO.334). Pl. 39. B-E, House B, Courtyard 12. L. 0.061, D. ends 0.033, D. waist 0.024. A badly worn, oval seal impression, on each end; the impression on one end, measuring 0.015×0.013 , appears larger than that on the other.

D127 (AO.432). Ill. 19, Pl. 40. B-E, Unstratified. L. 0.056, D. ends 0.038, 0.036, D. waist 0.024. Rounded depression in one end, probably made by a thumb or finger.

TYPE 3

D128 (AO.294). Pl. 39. B-E, House B, Room 11. L. 0.069, ends 0.039×0.037 , 0.036×0.035 , D. waist 0.031. Oval seal impression, 0.017×0.012 , on larger end. Diamond-shaped seal impression, 0.015×0.011 , on smaller end. Both illegible.

D129 (AO.184). Pl. 39. B-E, Place of Domestic Activity 29. L. 0.058, ends 0.035×0.032 , 0.033×0.032 , D. waist 0.028. Lopsided.

D130 (AO.403). Pl. 39. B-E, House C, Room 18. L. 0.059, one end 0.032×0.032 (other end damaged), waist 0.027×0.027 . Roughly circular seal impression, 0.014×0.013 , at one end, illegible.

D131 (AO.332). Pl. 39. B-E, House B, Courtyard 12. L. 0.055, ends 0.028×0.026 , 0.025×0.025 , D. waist 0.02.

D132 (AO.415). Ill. 19, Pl. 39. C, Structure 2. L. 0.064, ends 0.024×0.024 , 0.023×0.023 , D. waist 0.02. Lopsided.

D133 (AO.190). Pl. 39. B-E, Unstratified. L. 0.074, ends 0.028×0.025 , 0.025×0.025 , D. waist 0.025. Very irregular.

D134 (AO.333). Pl. 39. B-E, House C, Room 18. L. 0.067, ends 0.026×0.025 , 0.026×0.026 , D. waist 0.025. Very slight waist.

D135 (AO.146). Pl. 40. C, Unstratified. One end partly missing. L. 0.065, pres. end, max. 0.029, D. waist 0.021. Nearly circular seal impression, D. 0.011, unusually deep, illegible.

D136 (AO.37). Pl. 40. B-E, Unstratified. One end missing. L. pres. 0.041, pres. end 0.032×0.029 , D. waist 0.021. Oval seal impression, 0.017×0.014 ,

on end; simple cross. Beside it a deep punch mark, 0.006×0.006 .

D137 (AO.536). Pl. 40. F 5, House. L. 0.06, ends 0.026×0.026 , D. waist 0.018. Incised cross at one end.

D138 (AO.178). B-E, Unstratified. L. 0.065, ends 0.035×0.033 , 0.032×0.032 , D. waist 0.032. Very slight waist. Three circular seal impressions, D. 0.009, one on each end and one on waist; design worn but appears to be concentric rings.

D139 (AO.377). Pl. 39. B-E, House C, Room 17. L. 0.039, ends 0.019×0.018 , D. waist 0.017. Unusually small.

UNCLASSIFIED

D140 (AO.478). Pl. 39. B-E, Courtyard 31. L. 0.035, D. ends 0.041, 0.038, D. waist 0.017. Unusual in profile in that waist is nearly cylindrical and ends are nearly conical; slightly raised ridge at one end.

D141 (AO.459). Pl. 39. C, House C, Room 13. Ends triangular in section. L. 0.067, ends $0.03 \times 0.029 \times 0.026$, $0.025 \times 0.025 \times 0.023$, D. waist 0.021. Adaptation from Type 3?

PLAQUE

D142 (AO.487). Pl. 40. C, Well 8. One edge only preserved. L. pres. 0.13, W. pres. 0.105, Th. 0.027. Fairly coarse fabric. On one side stripes of red and white paint, parallel and perpendicular to preserved edge.

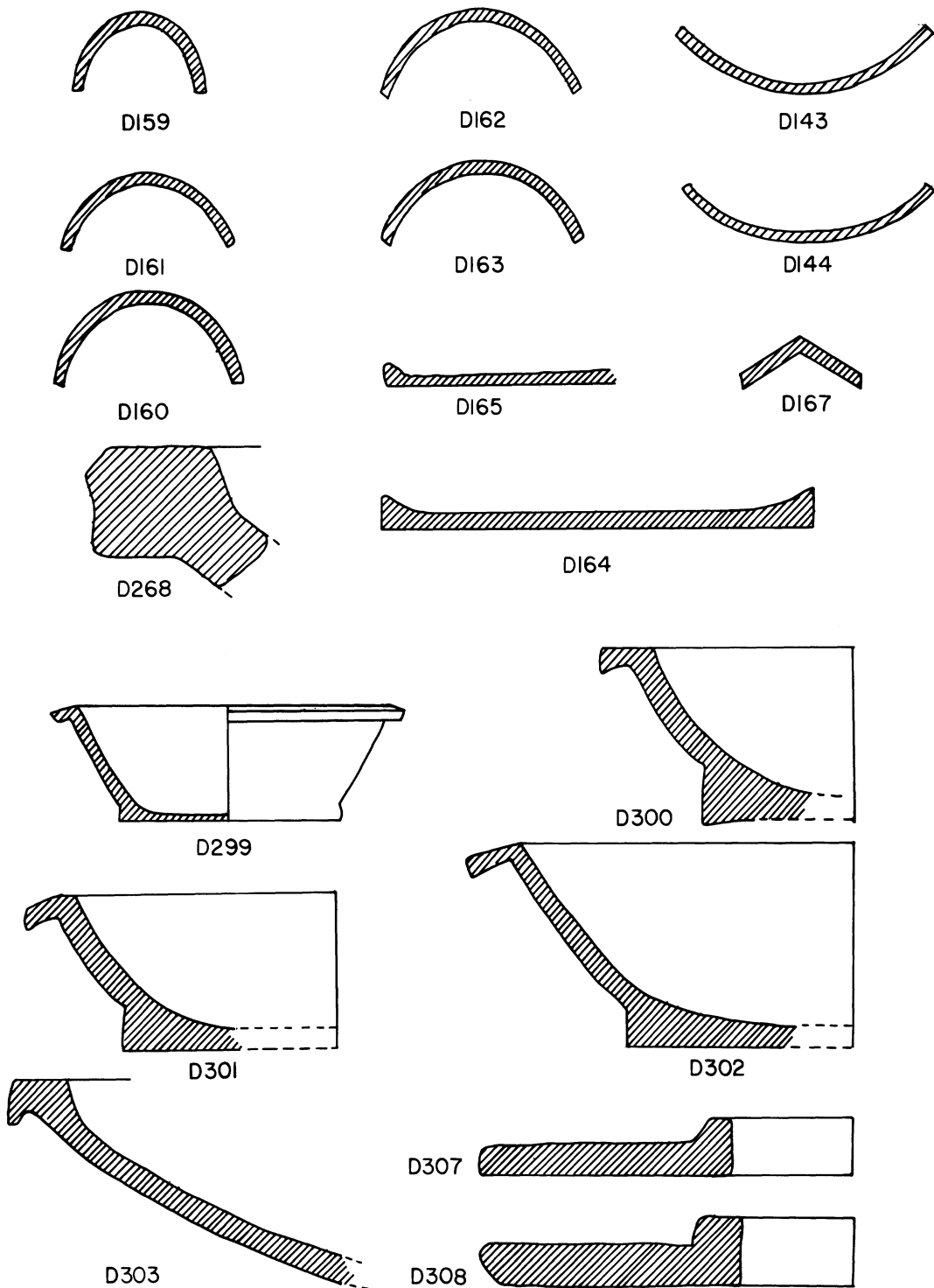
ROOF TILES

LACONIAN TYPE

Those from elsewhere are similar to the group from Well 8 in Area C, which is described in general above (p. 86). **D143**, **D145–D158**, **D160** are from the well; the provenience of the others is given below. All are fragmentary.

PANS

D143. Ill. 20. Fragment with complete profile. Max. W. pres. 0.40.



ILL. 20. Classical tiles and pottery: coarse ware. Scale **D143–D167**, **D299** 1:10; **D268**, **D300–D308** 1:5

D144. Ill. 20. C, House C, Room 12. Fragment with complete profile. Max. W. pres. 0.40.

D145–D150. Pl. 40. Fragments of top or bottom edges with shallow grooves or recesses on concave side.

D151. Pl. 40. Fragment probably of pan with bored hole (D. 0.025) near one end.

D152. Pl. 40. Fragment probably of pan with fine parallel grooves near one edge.

D153 (AO.501). Pl. 40. Grooves on convex side in zigzag design.

D154 (AO.502). Pl. 40. Incised design on concave side, made before firing; large diamonds divided by diagonal lines.

D155. Pl. 40. Impression of round object on concave side.

D156 (AO.508). Pl. 40. Impression of a child's foot on concave surface, made after glazing and before firing.

D157 (AO.546), **D158** (AO.547). Impressions of paws, probably of dogs.

COVERS

With full profile; width varies from 0.20 to 0.30.

D159. Ill. 20. B-E, Place of Domestic Activity 29.

D160. Ill. 20.

D161–D163. Ill. 20. C, Room 12.

CORINTHIAN TYPE

PANS

These are very rare and were probably not used for roofing; see above, p. 66.

D164. Ill. 20, visible in Pl. 8:a. C, Structure 2. W. 0.67.

D165. Ill. 20. C, Room 7.

D166 (AO.497). C, House C, Room 12. Two edges preserved at corner.

ANGULAR RIDGE TILE

D167 (AO.498). Ill. 20, Pl. 40. C, Well 8. Broken at either end. L. pres. 0.55, W. 0.18, Th. 0.025.

OTHER OBJECTS

D168 (AO.441). Pl. 40. B-E, Place of Domestic Activity 29. Cylinder. L. 0.039, D. 0.044.

D169 (AO.522). Pl. 40. C, Structure 2. Cylinder. Similar to preceding. L. 0.029, D. 0.035.

D170 (AO.229). Pl. 40. B-E, Unstratified. Stamp(?). L. 0.053, end 0.038 × 0.031. Probably a re-used pot handle.

D171 (AO.518). Pl. 40. C, Unstratified. Cylindrical except for irregular flange at one side. Broken at both ends. L. pres. 0.05. Many small perforations in rows on the top. Leg of figurine?

POTTERY

The Classical pottery is, for the most part, very badly preserved. Very few pots were found intact or complete enough to justify reconstruction. The surfaces, except for some of the pottery from Well 8 in Area C, are badly worn, and although most pots were surely covered with black glaze, at least in part, few traces now remain.

The clay of the fine ware is in general very fine, with few inclusions, and resembles that of the pottery from other periods. The fabric of the fired pots is fairly soft, and the surface, where unglazed, can be easily scratched with the fingernail. The fabric is generally light in color, predominantly light brown but sometimes yellow or red. The coarse ware is similar to the fine, but the clay is more sandy and has larger inclusions. Even in the coarsest ware the mineral inclusions are relatively few, presumably because few rocky particles occur naturally in the local clay beds. To

counter this difficulty, the potters apparently sometimes used small ground-up pieces of previously fired pottery or terracotta as grog for coarse ware and tiles; the result is an oatmeallike surface appearance.

Although most of the fine pottery was plain or black glazed, the Classical deposits produced evidence for the occasional use of red-figure decoration. Examples include a squat lekythos from a grave (**D218**) and a pelike (**D214**) and at least one krater (**D238**; perhaps also **D239**, **D244**) from the settlement. Since the red-figured pieces are indistinguishable in fabric, quality of glaze, and general technique from the rest of the Classical pottery, there is a strong presumption that they were locally produced. This presumption is reinforced by the evidence from the Workshop of Pheidias at Olympia (Schiering, 1964, pp. 248–256), which suggests that red-figured vases were produced locally in Elis, starting about 440 B.C. with the Perseus plate (*ibid.*, no. 12). Schiering (*ibid.*, pp. 249, 264–265) is somewhat doubtful about the Elean attribution of the pieces he publishes from the first half of the 4th century B.C. because of their similarity to contemporaneous South Italian painting. Although our pieces also have South Italian parallels, it is more likely that they were made locally rather than in Southern Italy, given the relative isolation of our site from outside contacts in the Classical period. Similar red-figured sherds are also now known from the city of Elis (Yialouris, 1970, pl. 187). The two sites have, in fact, produced the “*neue Funde*” that Schiering called for (*ibid.*, p. 249), and, in my opinion, any doubt about the Elean attribution of the Olympia pieces may now be laid to rest.

The catalogue comprises only the best preserved or most significant pieces; all, except where otherwise noted, may be dated approximately 410–365 B.C. A few earlier pieces are included for special reasons: **D267–D271** because they were found with Classical pottery; **D314** because its inscription is of interest.

Fine Ware

POTTERY FROM AREAS B-E, C, A, D, AND G

HANDLELESS BOWLS, SMALL

The small handleless bowls can be grouped in two categories: shallow, with spreading walls (**D172–D175**, **D180–D183**) and deep, with steep walls (**D176–D179**). Those of the first category usually have ring feet (e.g. **D172–D174**, **D180–D183**), although examples with low disk bases also occur (e.g. **D175**); the walls are usually continuously curved, but there are examples with projecting rims (e.g. **D182**, **D183**). Those of the second category are sometimes thickened toward the rim (e.g. **D177**, **D178**) and have ring feet, which sometimes take an elaborate form. All the small bowls, so far as they are preserved, appear to have been completely covered with black glaze.

At other sites such small bowls are often

called “saltcellars” (at the Athenian Agora probably only those of the second category would be so classified: Sparkes and Talcott, 1970, pp. 135–138). Both categories are common at Olympia: for the first see Schiering, 1964, pp. 226–227 and Gauer, 1975, fig. 30, nos. 16–18; for the second see Schiering, 1964, pl. 68, “*Salznäpfe*” and Gauer, 1975, fig. 30, nos. 19, 20. Bowls of the first category would fall within several of the subdivisions of small bowls established in the Athenian Agora, depending upon their specific characteristics (see below).

Small, handleless bowls appear in general to have gone out of use in Greece before the beginning of the Hellenistic period (Sparkes and Talcott, 1970, p. 132). The comparisons

with Olympia and elsewhere (see below) suggest that our examples may all be dated to the late 5th and early 4th centuries B.C.

SHALLOW, WITH SPREADING WALLS

D172 (AP.43). Pl. 42. B-E, House C, Room 19. H. 0.031, D. 0.084. Ring foot, D. 0.047, separated from body by groove. The closest parallels from the Athenian Agora for this and the two following vessels are Sparkes and Talcott, 1970, nos. 863–876 (dated from about 430 B.C. until just into the 4th century B.C.) and nos. 882–889 (described on p. 135 as “the commonest small bowl in the 4th century . . .”).

D173 (AP.10). Pl. 42. A, Trench 9. H. 0.031, D. 0.094. Rim slightly thickened inside; ring foot, D. 0.054, separated from body by groove. Cf. Gauer, 1975, fig. 30, no. 17. For other parallels see the preceding.

D174 (AP.71). Pl. 42. C, Well 8. H. 0.031, D. rim 0.085. Rim thickened inside; high ring foot, D. 0.049. For parallels see **D172**. The proportions of **D174** are very close to those of Sparkes and Talcott, 1970, no. 882 (ca. 380 B.C.).

D175 (AP.17). Pl. 42. B-E, House C, Room 16. H. 0.025, D. rim 0.085. Disk base, D. 0.04, slightly hollowed beneath. Cf. Schiering, 1964, pp. 226–227. Cf. also an example from Athens with higher disk foot: Sparkes and Talcott, 1970, no. 877 (ca. 400 B.C.).

DEEP, WITH STEEP WALLS

D176 (AP.11). Pl. 42. K, Grave 2. H. 0.037, D. 0.069. Ring foot, D. 0.052, separated from body by a groove. Cf. Schiering, 1964, pl. 68, “*Salznäpfe*” no. 3 (described, p. 225, as “*korinthisch*”).

D177 (AP.98). Pl. 42. F 5, Grave 1. H. 0.035, D. 0.07. Body thickening toward rim; torus ring foot, D. 0.042. Cf. Schiering, 1964, pl. 68, “*Salznäpfe*” no. 5 (described, p. 226, as “*elisch*”).

D178 (AP.51). Pl. 42. B-E, House C, Room 19. H. 0.03, D. 0.062. Rim thickened inside; high ring foot, D. 0.037.

D179 (AP.57). Pl. 42. B-E, Place of Domestic Activity 29. H. 0.035, D. 0.067. Rim thickened inside; ring foot, D. 0.04.

D180–D183, fragments. Pl. 43. All shallow, with spreading walls. **D180** and **D181** (both B-E, House B, Courtyard 12): plain rims; ring feet. **D182** (B-E, Unstratified) and **D183** (B-E, Passageway 13): projecting rims; ring feet. Bowls with projecting rims are mentioned as occurring at Olympia (Schiering, 1964, pp. 226–227), but none has been illustrated. Cf. also Sparkes and Talcott, 1970, no. 879 (425–400 B.C.).

ONE-HANDLED BOWLS, SMALL

All have plain rims and horizontal handles attached at or just below the lip. **D188**, the largest of those catalogued, has a ribbon handle like the large one-handled bowl **D189** (see below); the handles of the rest are round in section. They may have ring feet or hollowed disk bases. All were almost completely coated with glaze, as far as could be determined. The under surface of **D188** was completely glazed; that of **D187** was left unglazed.

Bowls of this type were widespread in Classical Greece (see, e.g., Sparkes and Talcott, 1970, pp. 124–127). Many have been published from Olympia (see especially Eilmann, 1941, pp. 55–56; Schiering, 1964, pp. 191–193; Gauer, 1975, pp. 198–202), where they range in date from the mid-6th century B.C. to the Hellenistic period. The closest parallels to our examples are dated to the late 5th century and to the first quarter of the 4th century B.C. (see detailed comparisons below). None of our bowls show the tendency to flare slightly at the rim that is characteristic at Olympia of bowls dated shortly before the middle of the 4th century B.C. (e.g. Eilmann, 1941, fig. 56; Gauer, 1975, pl. 41, nos. 12, 13).

D184 (AP.95). Pl. 42. F 5, Grave 1. H. 0.051, D. 0.095. Ring foot, slightly flaring. This and the two following are very close in dimensions and

proportions to an example from Olympia dated to the transition from the first to the second quarter of the 4th century B.C. (Gauer, 1975, pl. 41, 10 = fig. 30:13; see p. 202 for date).

D185 (AP.37). Pl. 42. B-E, House C, Room 19. Coleman, 1969, pl. 160:c. H. 0.052, D. 0.094. Ring foot. Cf. the preceding.

D186 (AP.72). Pl. 42. B-E, House C, Room 19. H. 0.046, D. 0.095. Disk base, slightly hollowed. Cf. the two preceding.

D187 (AP.58). Pl. 42. B-E, House C, Room 15. H. 0.047, D. 0.095. Disk base, slightly hollowed. Very close to an example from Olympia dating no later than the beginning of the 4th century B.C. (Schiering, 1964, p. 192, no. 3).

D188 (AP.73). Pl. 42. B-E, House C, Room 15. H. 0.058, D. 0.147. Ribbon handle; ring foot, slightly flaring. Unusually broad at the rim. This bowl gives the impression of a miniature version of large bowls like **D189**.

ONE-HANDLED BOWL, LARGE

Only one bowl of this type is catalogued, but fragments of others were noted. They differ from small one-handled bowls mainly in size.

D189 (AP.77). Pl. 42. B-E, House C, Room 15. H. 0.107, D. 0.228. Ribbon handle, extending upwards somewhat; ring foot; lip cut away somewhat toward the inside. No traces of glaze have survived. Examples from Olympia are close but not exactly similar: Schiering, 1964, p. 194, no. 8, dating to the later 5th century B.C., is similarly drawn in toward the base but lacks the cutaway lip; Gauer, 1975, pl. 31, no. 2 (from a well dated, p. 243, to the third quarter of the 5th century B.C.) has a handle which extends horizontally (cf. Schiering, 1964, p. 192, no. 3).

SKYPHOI

Although this is one of the most frequent shapes, all examples are incomplete. The body is sometimes completely glazed on the outside

(e.g. **D190**), sometimes left reserved at the junction with the foot (e.g. **D191**, **D192**). For detailed comparisons and dating see below.

D190 (AP.59). Pl. 42. C, Room 7. H. 0.082, D. est. 0.07. Handles missing. Torus ring foot; body somewhat angular; lip slightly flaring. Probably completely coated with glaze. Similar to examples from Olympia dating to the later 5th and early 4th centuries B.C. (e.g. Eilmann, 1941, fig. 40; Schiering, 1964, p. 188, no. 7; Gauer, 1975, fig. 23, nos. 7-9) and less strongly curved than those dating shortly before the middle of the 4th century B.C. (e.g. Eilmann, 1941, fig. 41; Gauer, 1975, fig. 23, nos. 10, 11). Cf. also Sparkes and Talcott, 1970, no. 349 (400-375 B.C.).

D191-D198, fragments.

D191. Pl. 42. C Well 8. Torus ring foot; lower part of body and upper part of foot reserved; underside reserved, with glazed ring and circle at center. For the painting on the underside of this and the succeeding example, cf. Gauer, 1975, fig. 23:7 and pl. 36:2 = fig. 23:9 (both described on p. 177).

D192. Pl. 42. C, Well 8. Torus ring foot; lower part of body and upper part of foot reserved; glazed ring and circle on underside. Cf. the preceding.

D193. Pl. 43. B-E, House B, Courtyard 12. Torus ring foot.

D194. Pl. 43. B-E, House C, Room 14. Torus ring foot.

D195. Pl. 43. B-E, House B, Courtyard 12. Torus ring foot.

D196. Pl. 43. C, Water Channel 6. Handle.

D197. Pl. 43. B-E, House B, Courtyard 12. Handle.

D198. Pl. 43. B-E, House C, Room 19. Handle.

STEMMED CUPS

Our examples belong to a type common at Olympia in the late 5th century and the first half of the 4th century B.C. (Eilmann, 1941, pp. 44-48; Schiering, 1964, pp. 220-225, "*Variante b*"; Gauer, 1975, pp. 196-198) for

which the term "Olympia-cup" has been suggested (Sparkes and Talcott, 1970, p. 282, under no. 265). The closest parallels to ours from Olympia are dated to the late 5th and early 4th centuries B.C. (comparisons below). **D205, D208–D211**, catalogued below under Fragments of Cups and Bowls, may also have come from stemmed cups.

D199 (AP.139). Pl. 43. F 4, Well. Missing part of rim, one handle, and foot. H. pres. 0.075, D. 0.11. Solid stem, body in two degrees, rounded rim; horizontal, high-swung handles, round in section. Solidly glazed inside and out. Four stamped palmettes inside bowl around a stamped circle 0.008 in diameter. For the shape, cf. Eilmann, 1941, fig. 37; for the stamped decoration, cf. Schiering, 1964, pl. 76:b.

D200 (AP.56). Pl. 43. B-E, Place of Domestic Activity 29. Missing lip and foot. H. pres. 0.043. D. pres. 0.086. Hollow stem with grooved ridge. Horizontally attached handles, now missing. Solidly glazed inside and out. Six stamped palmettes inside bowl around an incised double circle, surrounded at some distance by another double circle.

D201, D202, fragments of hollow stems. Pl. 43. B-E, House B, Courtyard 12.

D201, fairly low and spreading (cf. Eilmann, 1941, fig. 36) with projection near the top and horizontal groove on foot.

D202, projecting ring near middle, horizontal groove on foot (cf. Eilmann, 1941, fig. 37; Gauer, 1975, pl. 40, no. 8 and fig. 29:11).

FRAGMENTS OF CUPS AND BOWLS

D203–D211. Pl. 43.

D203. B-E, Place of Domestic Activity 29. Molded rim with place of attachment of horizontal handle beneath. Cf. similar vessels from Olympia (Schiering, 1964, pp. 220–225, "*Napf-shalen, Variante a*", especially pl. 75, no. 2; Gauer, 1975, pl. 40, no. 7 = fig. 29, no. 13).

D204. B-E, Place of Domestic Activity 29. Rim with slightly everted lip.

D205. C, Pit 1. Offset lip, convex in profile toward the outside, possibly from a stemmed cup (cf. **D199–D202** above).

D206. B-E, House B, Courtyard 12. Ring foot, fairly upright sides, possibly from a one-handled bowl (cf. **D184–D188** above).

D207. C, Unstratified. Spreading ring foot with concave molding on outside, fairly upright sides.

D208. C, Unstratified. Solid stem with fillet at junction to bowl; cf. similar vessels from Olympia (Eilmann, 1941, fig. 32; Schiering, 1964, pl. 74:1, from "*Schicht E*" and therefore [p. 141] no later than about 410 B.C.).

D209. C, Unstratified. Stem and part of disklike foot of a vessel like the preceding.

D210, D211. B-E, Passageway 13 and House B, Courtyard 12, respectively. Horizontal handles, probably from stemmed cups (cf. **D199–D202, D208, D209**).

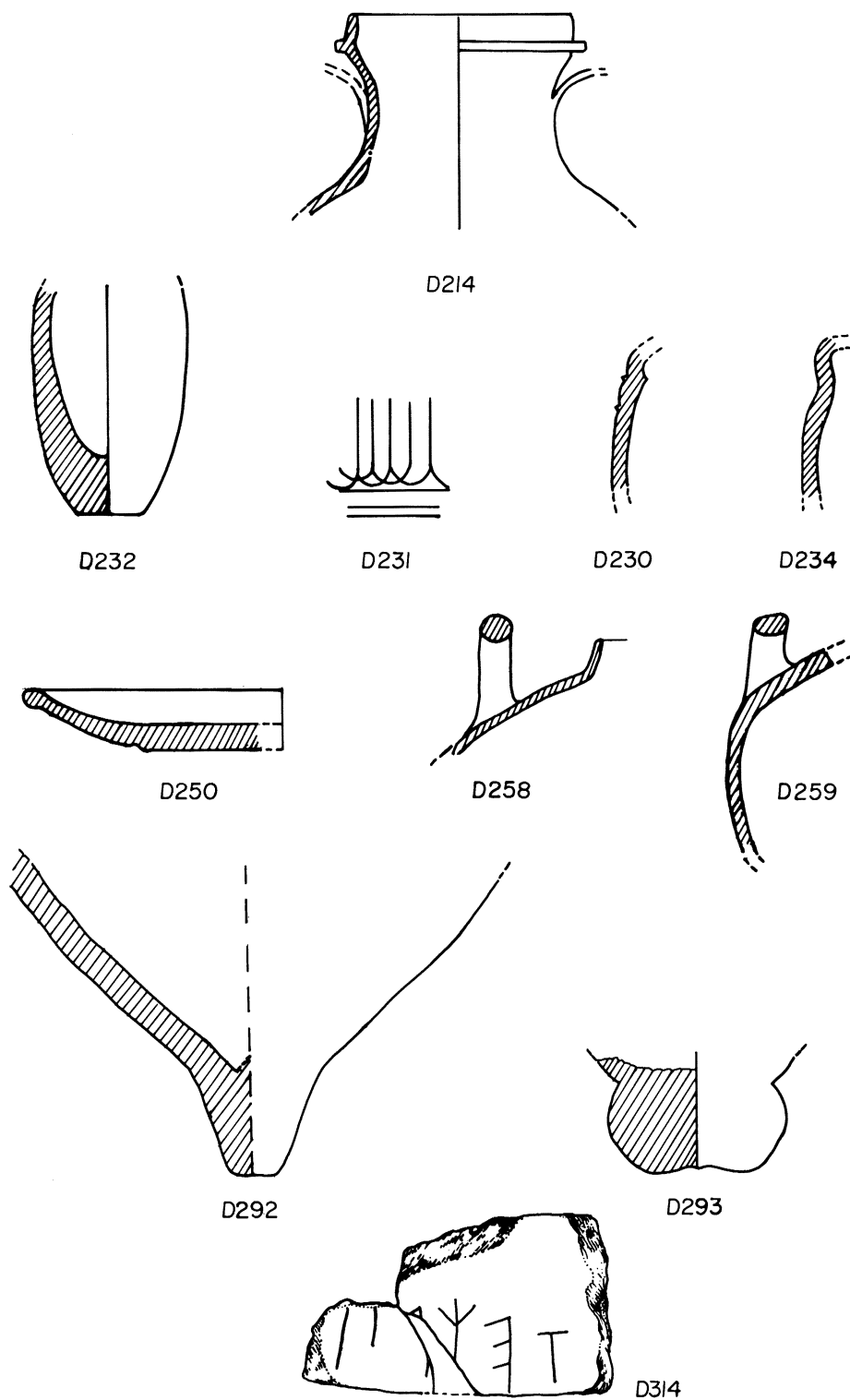
AMPHORAE

D212 (AP.22). Pl. 44. C, Well 8. Missing rim, part of neck and one handle. H. (to top of handle) 0.196, D. 0.171. Piriform one-piece amphora, torus ring foot; ridged strap handle. No trace of glaze. Cf. a similar vessel from Olympia (Gauer, 1975, pl. 9:6, dated [p. 133] to the early 4th century B.C.).

D213. Pl. 44. C, Well 8. Missing rim, handles and most of upper body. H. pres. 0.19, D. 0.156. Like the preceding. Two incised horizontal lines on shoulder.

PELIKE

D214 (AP.137). Ill. 21, Pl. 46. F 4, Well. Fragments of neck and upper body. Plain lip with projecting ledge on outside about 0.19 below the top. Attachments for upper end of handles about the middle of neck. Inside: neck glazed as far as shoulder. Red-figure decoration on outside, much worn: double wreath of ivy on lower neck, framed above and below by reserved bands; the lower row of ivy terminates to the left of one handle in a dot within a reserved circle. Two fragments, probably from shoulder, one with male head facing left, the other



ILL. 21. Classical pottery and Archaic inscribed fragment. Scale 1:5, except **D314** 2:5

unrecognizable. A local piece; for a discussion of the decoration see the general discussion of the Classical pottery above, p. 107.

LARGE ROUND-MOUTHED OINOCHOE

D215 (AP.91). Pl. 44. C, Well 8. Missing part of rim and some body fragments. H. 0.245, D. 0.205. Ring foot, globular body, offset neck with flaring rim. Ridged handle from rim (which is pushed in where handle is attached) to shoulder, projecting slightly above rim. A groove above a low ridge on upper body near junction with neck. Inside of rim and outside as far as bottom of handle coated with dark brown glaze, carelessly applied. Very close in shape and painting to a group of vessels from Olympia, some of which come from wells which went out of use in the second quarter of the 4th century B.C. (Gauer, 1975, pl. 6:5 and p. 101).

SMALL OINOCHOAI

D216 (AP.21). Pl. 44. C, Well 8. Missing upper part of neck and handle; partly restored in plaster. H. pres. 0.068, D. 0.062. Narrow, low disk foot; squat ovoid body strongly set off from foot; flat vertical handle. Covered with black glaze on all surfaces except beneath foot, which is painted with concentric circles. Probably round mouthed. The body belongs to the first variant identified at Olympia: Schiering, 1964, pp. 208–211 and pl. 65:1–3 (mid- to late 5th century B.C.); cf. Gauer, 1975, pp. 113–114 and pl. 14:9 (dated, p. 114, “*an der Wende zum 4. Jahrhundert*”).

D217 (AP.101). Pl. 44. B-E, House B, Courtyard 12. Missing upper part of neck and handle; partly restored in plaster. H. pres. 0.08, D. 0.053. Disk foot, slightly hollowed. Like **D216** but somewhat narrower. Similar to those from Olympia cited for **D216** except that the neck rises somewhat higher.

Other fragments, not included here, suggest that the second variant identified at Olympia (see references under **D216**) also occurred at Armatova.

SQUAT LEKYTHOI

D218 (AP.97), Pl. 44. F 5, Grave 1. H. 0.145, D. 0.063. Ring foot in two degrees; tall ovoid body; tall neck set off from body; flaring lip; ribbon handle from middle of neck to shoulder. Lip, upper part of neck, handle, a vertical band from neck to foot on handle side, and foot black; reserved band at junction of foot and body. Red-figure decoration, much worn. Tongues on lower part of neck. Panel on body framed by half palmettes, that to the left very crudely drawn: woman, seated on chair or stool, facing right, holding a mirror in her outstretched left hand and a thyrsos in her right hand; round object behind chair or stool. Traces of white paint on mirror, in palmettes, and elsewhere.

D219 (AP.48). Pl. 44. D, Byzantine or Frankish House, Room(?) 4 (see Part F below). Most of neck, handle, and part of foot missing. H. pres. 0.058, D. 0.041. Similar to preceding but smaller. Much damaged; decoration uncertain.

D220 (AP.96). Pl. 44. F 5, Grave 1. H. 0.125, D. 0.082. Ring foot; ovoid body, nearly conical shoulder; neck flaring abruptly to near cylindrical spout; handles from just below spout to shoulder. Glazed inside spout and outside except beneath foot.

D221 (AP.5). Pl. 44. B-E, House B, Doorway between Rooms 8 and 9. Upper part and handle missing. H. pres. 0.037, D. 0.064. Disk base, slightly hollowed beneath, with impressed ring on lower surface 0.015 from outer edge; groove between base and body. Squat body, moldmade, with separately applied neck. Fairly closely set vertical grooves on body. Surface worn; probably originally coated with glaze.

D222–D229, fragments. Pl. 45.

Flaring spouts: **D222** (B-E, Place of Domestic Activity 29); **D223** (B-E, House B, Courtyard 12); **D224** (A, Trench 9).

Conical spouts: **D225** (B-E, Place of Domestic Activity 29); **D226** (C, Water Channel 6).

Bodies: **D227** (C, Unstratified), grooves and incised decoration; **D228** (B-E, House B, Courtyard 12).

Handle: **D229** (as preceding).

LEKYTHOI WITH INCISED AND STAMPED DECORATION

The following are apparently from black-glazed lekythoi similar to examples from Olympia (Eilmann, 1941, figs. 46, 47) and Athens (Sparkes and Talcott, 1970, nos. 1142–1146) with grooves, incision, and stamped concentric circles. Three complete examples from a grave in the vicinity of Vounargou in Elis (Parlama, 1973, pl. 163:a) show that this type of lekythos had a sagging belly and was supported by a conical pedestal with spreading foot. The Vounargou examples are dated by Parlama to the last quarter of the 5th century B.C. and are described (*op. cit.*, p. 197) as *τῆς κατηγορίας τῶν «Ῥλεακῶν»*. No evidence is preserved at our site for neck and handles.

D230 (AP.36). Ill. 21, Pls. 43, 44 (photographed upside down). D, Trench 13, Unstratified (see below, p. 144). Fragment of upper body and shoulder; H. pres. 0.056. Fine, hard, orange-brown fabric, possibly Attic but probably Elean. Decoration. Shoulder: two zones, separated by a groove with a central ridge, filled with a stamped pattern of three concentric circles. Upper body: grooved tongues, narrowing toward the bottom of the vessel, with a scalloped upper edge terminating in a central stamped palmette; the tongues are filled with the same stamped concentric circles as the shoulder zones.

D231–D236, fragments.

D231. Pl. 43. B-E, Passageway 13. Ring foot; incised decoration as in Ill. 21.

D232. Ill. 21, Pl. 43. B-E, House B, Courtyard 12. Very thick walled, possibly terminating in flat bottom; traces of vertical grooves.

D233. Pl. 43. B-E, Unstratified. Similar to preceding but with possible horizontal groove near bottom.

D234. Ill. 21, Pl. 43 (photographed upside down). C, Structure 2. Similar to **D230** but with broad horizontal groove on upper body and tongues with

rounded upper ends; shoulder and tongues filled with stamped pattern of two concentric circles (very similar to Sparkes and Talcott, 1970, no. 1142).

D235. Pl. 43 (photographed upside down). D, Trench 13. Tongues filled with stamped pattern of two concentric circles.

D236. Pl. 43. C, House C, Room 12. Vertical grooves in a tongue pattern (perhaps not from a lekythos of this shape).

LAMP FILLER (?)

D237 (AP.8). Pl. 44. B-E, Courtyard 30. Missing part of neck and handle. H. pres. 0.048, D. 0.094. Hollowed disk foot, slightly grooved on outside and sharply separated from body by deep groove. Depressed globular body. Shoulder in two nearly horizontal steps; neck nearly cylindrical with rounded lip; attachment for flat ring handle on shoulder; conical tubular spout rising obliquely from shoulder. For a somewhat similar vessel, cf. Eilmann, 1941, fig. 45, right.

KRATERS

All appear to be bell-kraters of local manufacture. The flaring lip meets the body in a continuous curve. At least some stood on spreading ring feet, if the fragments **D246–D249** are correctly assigned to this shape. The red-figure decoration on **D238** is clearly of local character. **D239** and **D244** may also have been red figured. It is unclear how the rest were decorated.

The shape occurs at Olympia in the first half of the 4th century B.C. (Schiering, 1964, p. 230; cf. the comparisons cited below).

D238 (AP.60). Pl. 46. C, Well 8. Coleman, 1969, pl. 160:a. Fragments of rim and upper body. H. rim fragment 0.05, H. body fragment 0.155. Flaring rim, grooved on outside just below lip. Inside glazed except for reserved bands at top of lip and juncture of lip and body. Outside red figured. Lip: single row of ivy. Lower body: band of pot-hook spirals framed above and below by reserved bands. Figured panel, framed at right by tendril and palmette pattern:

mantled man with somewhat bent knees, facing left; fillet suspended to left of head; behind him is an unidentified object, from which hang what appear to be bunches of grapes. Elean. Close in both technique and style to a calyx-krater found at Olympia (Schiering, 1964, p. 265, no. 17); cf. especially the band of spirals. For comments on Elean red figure see the general discussion of the Classical pottery above, p. 107.

D239–D249, fragments. Pl. 45.

Plain flaring rims: **D239** (B-E, Place of Domestic Activity 29), probably with a row of ivy in red figure; **D240** (B-E, Unstratified); **D241** (B-E, Place of Domestic Activity 29).

Handles: **D242** (B-E, House B, Room 9); **D243** (B-E, Courtyard 27).

Lower bodies: **D244** (C, Unstratified), probably red figured, now illegible; **D245** (C, Well 8), reserved bands at junction with foot.

Feet: **D246** (C, Well 8), spreading ring foot, conical on the top, and slightly convex outer face, reserved ledge at junction with top; **D247** (AP.32; B-E, House B, Courtyard 12), similar to preceding. **D248** (B-E, House B, Room 5), ring foot; **D249** (C, Structure 2), spreading ring base with two scraped grooves.

PLATES

D250–D257, fragments. All but **D250** certainly or probably with ring foot.

Rims: **D250**, Ill. 21, Pl. 45 (C, Unstratified), platter, grooves on outside below rim and at juncture with base; **D251**, Pl. 45 (C, Unstratified), three grooves on the top of the lip; **D252**, Pl. 45 (B-E, House B, Courtyard 12), flaring ring base of only slightly less diameter than rim, two grooves on the top of the lip, and probably pierced vertically near rim; **D253**, Pl. 45 (C, Unstratified), plain rim.

SHERDS FROM AREA F 4, HOUSE, Pl. 47

D264. Torus ring foot, probably from skyphos.

D265. Shallow bowl; ring foot with nearly pointed resting surface.

D266. Plate.

Other, Pl. 45 (C, Well 8): **D254**, stamped palmette outside a circle of stitched rouletting; **D255**, five incised concentric circles near center, regular rouletting at a greater diameter; **D256**, two concentric grooves near center; **D257**, similar to preceding; pierced vertically near rim.

For another plate from Area C, House C, Room 12 see Themelis, 1965, pl. 252:β (from C, House C, Room 12).

CLOSED VESSEL (PYXIS ?)

The following appear to come from pyxides or lebetes. The shape is close to that of Archaic pyxides from Tocra: Boardman and Hayes, 1966, pl. 11. They are also somewhat similar to chytrai from Athens (Sparkes and Talcott, 1970, nos. 1947–1958) and Olympia (Gauer, 1975, pl. 28:3), but our vessels are smaller and not of cooking-ware fabric.

D258, D259, fragments. Ill. 21, Pl. 45. C, Well 8.

D258. Shoulder and upturned lip, rolled horizontal handle projecting above lip; glazed on outside.

D259. Similar, but with smaller handle; reserved bands in handle zone and on body.

LIDS

D260–D263, fragments. Pl. 48. B-E.

D260 (AP.20). Passageway 13. Flat in center; rising rim; waisted knob, pointed on the top.

D261 (AP.7). House B, Room 9. D. 0.135; similar to preceding; rim terminating in horizontal lip.

D262 (AP.35). House B, Room 5. Bottom flat; top rising to a rounded, waisted knob.

D263 (AP.34). House B, Room 5. Like preceding.

The feet of **D264** and **D265** are heavier than is usual with the other Classical pottery from the site. **D264**, which is unusually broad and spreading, may be compared with Gauer, 1975, pl. 36:3 and 4 (from wells dated to the third quarter of the 5th century B.C.); thus the house may well date somewhat earlier than the other Classical remains.

OTHER POTTERY FROM AREA F 4, WELL

Two pieces from this well have already been described (**D199**, **D214**). The following catalogue includes two Archaic pieces of special interest because of their decoration in relief (**D267**, **D268**) and a group of sherds of Archaic and Classical date.

ARCHAIC

D267 (AP.52). Pl. 47. Rim fragment of basin. L. pres. 0.15, D. est. 0.36. Flat top. Flat outer surface, including inwards from top to bottom, H. 0.039, with impressed design from a cylindrical seal: lotus with spreading petals forming arch over interspersed palmettes; stamen between each petal with tripartite termination (that near the center of the photograph is perhaps damaged or perhaps had a bulbous form); tendrils from stem on either side of lotus flower with drooping buds beneath lower edges of palmettes. Fragments from Olympia of a basin (Schiering, 1964, pl. 62:21) and of a "*Tonplatte(?) oder Tonwanne*" (*ibid.*, p. 163 and pl. 63:20) are decorated with somewhat similar designs, also made with a cylinder seal. The Olympia designs differ in that the palmettes are suspended upside down beneath the lotus flowers; Schiering (*op. cit.*, p. 164) considers them to be of Corinthian origin and dates them to the third quarter of the 6th century B.C.

D268 (AP.47). Ill. 20, Pl. 47. Rim fragment of basin. L. pres. 0.145. Flat top. Outer face, H. 0.081, with groups of three parallel grooves framing panels; a stamped rosette with 13 petals within a circle in each panel. Cf. the very similar rosettes stamped on a fragment of a large krater from Olympia with elaborate relief decoration (Schiering, 1964, pl. 63,

below) dated by Schiering (*op. cit.*, p. 164) to the third quarter of the 6th century B.C. Cf. also Sparkes and Talcott, 1970, no. 1517 (with seven and eight petals; dated to the late Archaic period).

D269–D271, Archaic sherds. Pl. 47.

D269. Rim and shoulder of cup; painted dots in reserved band on body (cf. **C134**, **C135** above).

D270. Black lines (representing grasses?) on light ground (cf. **C163–C165** above).

D271. Rim of bowl with everted lip; reserved bands on outside.

CLASSICAL SHERDS, Pl. 47

D272. Torus ring foot of skyphos; solidly glazed on outside; resting surface and broad ring beneath foot reserved.

D273. Similar; reserved band just above foot on outside; resting surface and three rings beneath foot reserved.

D274. Plate; five stamped palmettes spaced around two incised concentric circles.

D275. Plate; two incised concentric circles with tangential lines (for palmettes?) on inside; molded rings on bottom.

D276. Lekythos(?); vertical grooves.

SHERDS FROM AREA F 5, HOUSE, Pl. 47

D277. Stemmed cup.

D278. Neck of lekythos (like **D218**).

D279–D281. Lekythoi(?) with vertical ribbing.

D282. Lekythos(?) with widely spaced vertical grooves.

D283. Rim of krater; reserved band inside; groove and red-figure ivy pattern on outside (cf. **D238**).

D284. Plate with pairs of incised concentric rings on inside.

D285. Rim of plate; single groove on top and just beneath rim.

D286. Small vessel with ring base.

Coarse Ware

AMPHORAE

D287–D295, fragments. C, Well 8, except **D294** and **D295**.

Necks, Pl. 49: **D287**, flaring lip; **D288**, concave neck; **D289**, flaring lip, cylindrical neck, handle attached just below lip; **D290**, plain lip with handle attached just below it. **D291**, handle from preceding.

Bases: **D292**, Ill. 21, Pl. 49, nearly pointed toe; **D293**, Ill. 21, Pl. 49, bulblike knob, slightly concave on bottom; **D294**, Pl. 49 (B-E, House B, Doorway between Rooms 8 and 9) and **D295**, Pl. 49 (B-E, House B, Courtyard 12), both similar to preceding.

JARS

D296, D297, fragments. Pl. 48. C, Well 8.

D296. Uprturned lip, angular transition from shoulder to body, spool lug on upper body; applied plastic strip near end of lug.

D297. Body with crescent lug; two horizontal bands framed by grooves beneath lug, the lower divided by diagonal and curved horizontal grooves; similar band above lug.

BASINS

D298 (AP.136). Pl. 49. B-E, House B, Courtyard 12. Mended, partly restored. L. 0.90, H. 0.10. Oval; flat bottom; slightly spreading sides; broad lip, flat on top, projecting to outside.

D299. Ill. 20, Pl. 49. C, Well 8. D. 0.53 if round.

D300–D303, fragments. Ill. 20.

D300. B-E, House B, Courtyard 12. D. 0.38.

D301. C, Unstratified. D. 0.47 (if round).

D302. B-E, House B, Courtyard 12. D. 0.58.

D303. C, Water Channel 6. D. 0.65.

LARGE LIDS AND COVERS

D304 (AP.50). Pl. 48. B-E, House C, Room 15. About one third missing. D. 0.28, H. 0.038. Flat on bottom; vertical edge with groove. Top, from outside toward center: groove, band with slightly convex profile, two grooves, band with flat profile, low

conical knob with ridge around the bottom and molded concentric rings on the top.

D305 (AP.75). Pl. 48. B-E, Place of Domestic Activity 29. Missing about one half. D. 0.475, H. 0.054. Flat. Outer edge rounded. Central collar with conical opening, D. 0205.

D306 (AP.76). Pl. 48. B-E, Place of Domestic Activity 29. Two non-joining fragments. D. est. 0.52, H. 0.058. Like preceding. Diameter of central opening 0.21. Top decorated with groups of concentric grooves.

For lids with holes similar to **D306** and **D307** see **B73–B76** and **C189** above. For a lid almost identical to **D306** found covering a pithos used as a burial jar see Panathanasopoulos, 1969, pl. 149:β.

D307, D308, fragments with central openings. Ill. 20. C, Well 8.

STANDS (LOUTERIA?)

D309–D313, fragments. Pl. 49. C, Well 8.

D309. Flaring, with offset bottom, incised rings, and a cut-out section.

D310. Flaring base with grooves on offset bottom and sides with flat facets (fluting?).

D311 (photographed upside down). Spreading bowl, grooved ring at junction with fluted cylindrical stand.

D312, D313. Cylindrical stands with horizontal projections and grooves.

PITHOI

See above, Area F 5, Grave 1 and Area K, Grave 2, for descriptions of pithoi used as burial jars.

ARCHAIC INSCRIBED FRAGMENT

D314 (AP.42). Ill. 21, Pl. 49. D, Trench 3. Two pieces, probably joining, partly reconstructed in plaster. Rim of jar or pithos. L. pres. 0.111. The outer edge of rim is vertical with a decoration of punctated rectangles with diagonals. Flat top with retrograde inscription near outer edge: ΤΕΨΓ[---?].

PART E. ROMAN

The hilltop Armatova was apparently left unoccupied from the 4th century B.C. until the 12th or 13th century after Christ (see below, Part F), although the eastern end may have been used for burials (see below, Part G). Substantial evidence for occupation in the Roman period, however, came to light in two fields to the northeast of the hill itself (Map 3, F 2 and F 3). A few coins and sherds from the fields suggest that there was also occupation of some sort between the first half of the 4th century B.C. and the Roman period.

1. AREA F 3

(Ill. 22, Pl. 10)

This is located at the northeast side of a small stream which leads into the Peneios River from the southwest (Map 3). We were drawn here not only by the scatter of sherds on the surface but also by the existence of a slight rise in ground level which gave the appearance of a low mound. Eight trial trenches were excavated at the northwest side of the rise at intervals of 10–20 m. (Ill. 22). Initially each trench (except Trench 6) measured 2 × 4 m. and was aligned northwest–southeast; four were subsequently somewhat extended.

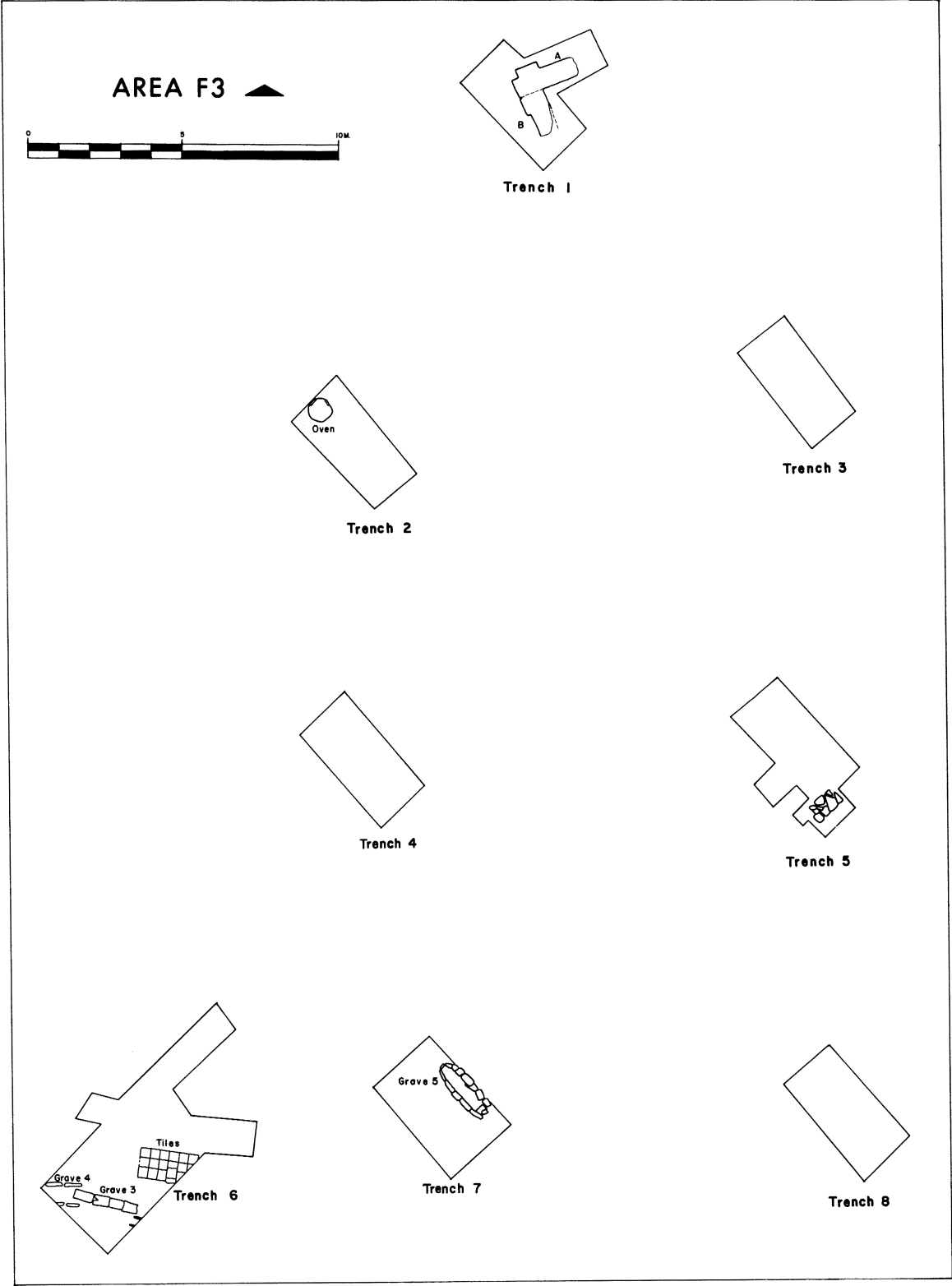
Since the archaeological remains were very fragmentary and the stratigraphy ambiguous, only tentative conclusions may be drawn. Coins from Trench 6 (especially **E1** and **E2**) and sherds from several trenches suggest that there was already activity here in the Hellenistic period. Most of the datable finds, however, belong to the 3rd and 4th centuries after Christ. The latest finds are coins of the family of Constantine (e.g. **E4**). The few structures found other than graves (the most important of which are the walls in Trench 1) should probably all be dated to the 3rd and 4th centuries after Christ. Graves 3–5 (which contained no offerings except for the bronze rings in Grave 4) should probably be dated later, presumably to the Byzantine period (see p. 151 below, Part G).

A brief description follows of each trench except Trench 4, together with a summary list of the most significant finds from beneath the disturbed surface layer; a catalogue follows. Trench 4 is omitted, since it produced no significant structures or finds. Uncatalogued objects include six bronze coins (one Athenian New Style, the rest all 4th century after Christ), many fragments of glass vessels, and many sherds (the most interesting of which bear incised patterns).

TRENCH 1 (Ill. 22, Pl. 10:a, b)

The initial trench was extended toward the northeast. Two walls were exposed (A and B in Ill. 22) which evidently formed the northwest corner of a room or structure aligned roughly with the cardinal points of the compass. The walls, which were preserved to a maximum height of 0.80 m., were constructed of unworked stones and fragments of terracotta tiles, bedded in cement. They rest on the top of a loose foundation of stones and tiles which project somewhat beyond the wall faces (Pl. 10:b). Wall A has a width of about 0.65–0.70 m. It

II. THE FINDS



ILL. 22. Plan of Area F 3

terminates abruptly towards the east, but whether as a result of destruction or because there was a door or opening is unclear; the layer of stones on which it was bedded continues to the east a short distance beyond the end of the wall (Pl. 10:b). Wall B was probably about 0.60 m. wide, but the line of its west face could not be accurately distinguished. A spur with a finished face on all three sides projects from the north side of Wall A about 0.30 m; it does not align exactly with Wall B. There is a similar but wider projection from the west face of Wall B and the corner of Walls A and B.

Uncatalogued: fragments of three glass vessels (AO.165, AO.166, AO.214).

TRENCH 2 (Ill. 22, Pl. 10:d)

Two significant features: an area of soft, black earth with many fragments of plaster near the center of the trench, possibly representing the position of a dismantled wall; a circular structure, diameter *ca.* 0.80 m., built of terracotta tiles and clay, probably an oven, near the northwest end of the trench (Pl. 10:d).

Coin, bronze: of Tacitus (**E3**). Uncatalogued: one 4th-century (after Christ) bronze coin (AO.89), five fragments of glass vessels (including AO.158, AO.159, AO.172), two pieces of cut stone, probably mosaic tesserae (AO.70, AO.71).

TRENCH 3 (Ill. 22)

No significant structures.

Coins, bronze: of Sikyon (**E1**), of Elis (**E2**). Bone: pin (**E8**). TC: lamp (**E9**). Uncatalogued: two bronze coins (AO.91, Athenian New Style; AO.93, late 4th century after Christ); one iron nail (AO.77); two fragments of glass vessels (AO.161, AO.168).

TRENCH 5 (Ill. 22)

The initial trench was extended to the southeast and southwest. One wall (W. 0.50 m., H. pres. 0.30 m.) of moderate-sized stones, aligned roughly northeast–southwest, was cleared near the south corner of the trench.

Pottery: bowl (**E10**). Uncatalogued: one object of iron (AO.76); seven fragments of glass vessels (AO.155, AO.157, AO.162–AO.164, AO.171).

TRENCH 6 (Ill. 22, Pl. 10:e)

The initial trench, 8 (NE–SW) × 1.0 m., was extended toward the southeast. A rectangular area paved with flat, rectangular tiles (0.30 × 0.30 × 0.03 m.) was partially excavated near the middle of the trench; L. at least 1.90 m., W. 0.95–1.0 m. The tiles are bedded in cement,

beneath which is a layer of rounded stones, and beneath that another layer of cement. The tile paved area was probably the floor of a grave whose walls have disappeared; cf. graves of the 4th century after Christ at Maximianoupolis in Thrace (Pentazos, 1969, p. 363, pl. 371).

Three groups of stones found at roughly the same elevation as the tile-paved area possibly belonged originally to structures now lost; one is to the north of and one to the northwest of the tile-paved area; the third projects from the southwest scarp of the trench.

Graves 3 and 4 were discovered near the southwestern end of the trench. A pair of stones projecting from the southeast scarp possibly belong to a third, unexcavated grave. The date of these graves is impossible to ascertain; presumably they belong to Roman or Byzantine times; see further discussion of such graves in Part G.

(Other than from graves)

Coin, bronze: of Valens (**E4**). Uncatalogued: one
bronze coin (AO.88, family of Constantine), one
iron nail (AO.50).

GRAVE 3 (Ill. 22, Pl. 10:f)

Tile grave, aligned roughly east–west. Max. interior L. 2.05 m., W. 0.56 m. Earth floor; sides and cover, semicircular in section, of curved pan and cover tiles. Interior H. 0.28 m.

Skeleton unusually tall (1.85 m.), probably of a man; extended on back, head to west, arms folded over abdomen, right above left.

No offerings found.

GRAVE 4 (Ill. 22, Pl. 10:f)

Slab-sided grave, only partially excavated; to the west of and partly above Grave 2; its floor was about 0.22 m. higher than that of Grave 2. Aligned roughly east–west. Interior W. 0.48 m. Earth floor; sides of small upright slabs of stone; cover missing.

Only a few scraps of bone; most of body probably lay to the west, beyond the trench.

Bronze: rings (**E6**, **E7**).

TRENCH 7 (Ill. 22)

The initial trench was extended toward the northeast to facilitate the excavation of Grave 5, the only significant feature.

(Other than from Grave 5)

Uncatalogued: one fragment of a glass vessel
(AO.160).

GRAVE 5 (Ill. 22, Pl. 10:c)

Walls built of small to moderate-sized stones with some fragments of terracotta tiles. Aligned roughly northwest–southeast. Max. interior L. 1.68 m., W. 0.43 m. Cover of six slabs (one missing). Floor of packed earth with occasional pebbles. Interior H. 0.30 m.

Skeleton extended on back, head to northwest, arms folded over chest.

No offerings found.

Although Grave 5 cannot be closely dated, it bears a general resemblance to Graves 29 and 30 in Area A (see below, Part G) and to the stone built graves in “Tymboi I and II” excavated by Themelis (1965, p. 219, nos. 6, 7) and possibly belongs to the Byzantine period; see further discussion in Part G.

TRENCH 8 (Ill. 22)

No significant structures.

Bronze: ring (**E5**). Uncatalogued: two bronze coins (AO.95, late 4th century after Christ; AO.96, family of Constantine).

CATALOGUE: AREA F 3

COINS

BRONZE

E1(AO.94). Trench 3. Sikyon, *ca.* 323–251 B.C. ↗ Poorly preserved. Obverse: dove flying left. Reverse: ΣI in wreath of olive. Cf. *SNGCOP*, Phliasia-Laconia, nos. 80–82.

E2 (AO.90). Trench 3. Elis, *ca.* 271–191 B.C. ↘ Worn. Obverse: head of Apollo right, laureate. Reverse: FA; Zeus striding right with thunderbolt and eagle; to left traces of monogram, to right Σ. Cf. *SNGCOP*, Phliasia-Laconia, no. 435.

E3 (AO.92). Pl. 54. Trench 2. Antoninianus of Tacitus, A.D. 275–276. ↘ Minted at Siscia. Obverse: IMP C M CL TACITVS P AVG; radiate bust of Tacitus right, draped. Reverse:

LAETITIA AVG $\frac{I}{XXIV}$

Laetitia draped standing half left, holding wreath in right hand; left hand holding anchor on globe. Cf. Mattingly and Sydenham, 1923–1933, V, i, p. 344, no. 185.

E4 (AO.46). Pl. 54. Trench 6. AE 3 of Valens, minted at Siscia, A.D. 367–375. ↓ Obverse: inscription [DN VA]LEN-SPFAVG; bust of emperor, pearl diademed, right, border of dots. Reverse:

mint mark $\frac{K|Q}{P|Q}$
ASISCR

SECVRITAS REIPVBLICAE; Victory striding left with wreath in upraised right hand and palm in left. Carson, Hill, and Kent, 1969, II, no. 1379.

BRONZE

E5 (AO.125). Pl. 37:g. Trench 8. Ring like **D17** and **D18** (Part D). D. 0.021, D. rod 0.004. Overlapping ends terminate in spheres attached to rectangular

pyramids of several stages. No decoration visible on rods, which are worn.

E6 (AO.127). Pl. 52. Trench 6, Grave 4. Open ring. D. 0.026, D. rod 0.002. Round in section. Ends blunt. Probably earring (making, with **E7**, a pair).

E7 (AO.129). Pl. 52. Trench 6, Grave 4. Fragment of ring like preceding.

BONE

E8 (AO.85). Pl. 41. Trench 3. Fragment of pin, broken at both ends. L. pres. 0.053, D. max. 0.005, D. min. 0.003. Tapering. Oval in section toward broad end, round toward narrow end.

TERRACOTTA OTHER THAN POTTERY

LAMP

E9 (AO.97). Pl. 52. Trench 3. Fragment of the disk of a lamp. Pres. dim. 0.051×0.048 . Head of Athena, molded in high relief; facing left, with crested Corinthian helmet, holding a spear over her right shoulder. Hair in wavy strands coming from under

helmet, over ears, and down back of neck. Cf. Perlzweig, 1961, nos. 653–659; Broneer, 1930, nos. 1102–1108. Mid-3rd to early 4th century after Christ.

POTTERY

E10. Ill. 25. Trench 5. Fragment from the rim of a red-slipped bowl ("African Red Slip Ware"). D. ca. 0.36. Cf. Hayes, 1972, pp. 112–116, form 67. Late 4th century after Christ?

2. AREA F 2: CEMETERY

(Fig. 4; Pls. 11–14)

This area comprises the field formerly owned by V. Tsarouchas where two graves had been excavated by Themelis (1965, pp. 217–218, no. 11) before the arrival of our expedition. It is located in nearly level ground immediately to the northwest of the Classical house and well already discussed (Area F 4) and to the southwest of Area F 3 on the other side of the stream (Map 3).

The Archaic well already described (Part C above) provided the earliest indication of human use of this area. Above the well and extending throughout our trenches (except where interrupted by the graves to be discussed below) we excavated a shallow deposit containing remains of various periods in no clear stratigraphic order. In general this deposit reached a maximum depth of only *ca.* 0.50 m., and the uppermost 0.20 m. was much disturbed by recent cultivation. It contained a few sherds of the Archaic and Classical periods, a group of coins and sherds of the 4th century B.C. (and perhaps later), and another group of objects and sherds contemporary with the graves to be discussed. Nothing was recognized

which could be dated later than the Roman period. A few of the most important pieces from this deposit are described separately below (pp. 136–138).

In the Roman era this field was used for a cemetery of considerable size (Fig. 4). We cleared 17 graves in 1968 and to these we must add the two previously excavated by Themelis.¹ Time did not permit us to determine the precise extent of the cemetery, but surface indications suggest that there were originally many more graves between the two groups excavated by us and also further toward the west.

The graves had been dug into the shallow deposit already described and penetrated the virgin soil beneath only slightly, if at all. Most of them were encountered almost immediately beneath the present surface, and in many cases their covers were lost or destroyed by recent cultivation.

Two groups of graves were excavated, here designated the southwest group and the northeast group. There are no significant differences between the types of graves and burial customs in each group, and the following general remarks apply to both. The graves were not oriented in any particular direction, although certain trends may be noted (e.g. the graves with built walls are all aligned roughly north–south).

The graves were evidently of three types (Ills. 23, 24): five (Graves 8, 9, 10, 12, 13) have walls built of tiles, stones, or both tiles and stones; seven (Graves 6, 7, 11, 15, 17, 18, 19) are tile covered; and one (Grave 22) is a burial in a simple pit. The four others (Graves 14, 16, 20, 21), which are somewhat disturbed, are burials in pits which may originally have been tile covered.

The graves with built walls are rectangular, boxlike structures. Graves 10, 12, and 13 are roughly the same size, with an interior length varying from 1.70 to 1.80 m. Graves 8 and 9 are smaller, Grave 9 having a length of only 1.00 m. The walls of Graves 8, 9, and 12 are built entirely of flat tiles, whole or fragmentary, bedded in cement mortar; those of Graves 10 and 13 are built primarily of flat, unworked stones with tiles only for the uppermost courses. The tiles used are virtually identical from grave to grave: they measure about 0.30×0.30 m. and have a thickness of 0.03–0.04 m. Occasionally there is grooved decoration on one surface, either three parallel grooves adjacent to two opposite edges (Graves 8 and 9) or curving parallel grooves (Grave 12, Pl. 48; Grave 13). The same tiles are also used for the floors of Graves 8 and 9. No evidence for the covers of the built graves has survived; probably they were of perishable material (wood?). Graves 8 and 9 are so similar in construction and orientation that they must be about contemporary; the same is also true of Graves 12 and 13. Probably all five of the graves with built walls are roughly contemporary; since Graves 12 and 13 may be placed within a sequence, it is likely that the built graves were neither the earliest nor the latest in the cemetery.

Graves similar to the preceding with walls built of flat tiles are known from the near-by sites of Elis (Papathanasopoulos, 1969, p. 153) and Kalyvia (Parlama, 1973, pp. 204–205), and they are reported to occur as early as the Hellenistic period.

¹ One of the graves cleared by Themelis was empty (probably robbed); he considered it Classical on the basis of sherds found within it (1965, pl. 252:γ). It now appears likely that this grave should also be dated to the Roman period; the Classical sherds in this field evidently antedate its use as a cemetery.

The tile-covered graves comprise those in which the body was laid on the floor of a pit and then roofed over with pan tiles put on edge, one opposite another, to form an arch. Sometimes the head or feet of the body protruded beyond the cover (e.g. Grave 19). There was no certain instance of grooved or other decoration on the tiles so used; the markings on one from Grave 17 (*q.v.*) may have been intended for decorative effect, but they are so lightly incised that their purpose is doubtful. The relative sequence of Graves 11 and 12 suggests that the tile-covered graves may have preceded built graves in the cemetery, but it is likely that they also were in contemporaneous and perhaps even later use.

Grave 22, a burial in a simple pit, may have been roofed over with some perishable material which left no trace.

The construction of Graves 14, 16, 20, and 21 is uncertain. They may have been simple interments in pits, like Grave 22, but since they were somewhat disturbed, it is also possible that the burials were covered with tiles or that the pits were roofed with tiles.

There was little stratigraphic evidence for the relative sequence of the graves. Grave 11 was earlier than Grave 12, Grave 13 was earlier than Grave 14, and Grave 6 was probably earlier than Grave 7. For details, see the descriptions below of the individual graves.

In every case where the skeleton was in more or less natural order, the body was placed in an extended position on its back. The head was not consistently oriented in any particular direction. Thirteen of the seventeen graves evidently contained single interments, in three cases (Graves 6, 8, 15) probably those of children, to judge by size. Four graves (Graves 10, 11, 20, 22) contained two burials, a practice not confined to any one type of grave. The skeletons in Grave 10 were both relatively intact and may have been buried simultaneously; in the three other cases, one of the skeletons was fragmentary, and there was probably a sequence of burials.

All the burials are probably to be dated to the 2nd and 3rd centuries after Christ. The earliest objects found, a lamp (**E22**) and an amphoriskos (**E42**), may have been manufactured in the 1st century; the lamp, however, comes from a burial certainly made in the 2nd century (Grave 19, which also contained a coin of Hadrian), and the grave containing the amphoriskos (Grave 21) is also probably of the early 2nd century. Nothing was found that necessarily dates later than the mid-3rd century.

A closely similar cemetery at the near-by city of Elis has been mentioned in preliminary reports (see especially Yialouris, 1977, p. 179). It has been dated by the excavator to the 2nd century after Christ and comprises at least ten graves, eight of which are tile covered. Later burials at Armatova are also somewhat similar to those in the cemetery in Area F 2; see Parts F and G (with general discussion).

The objects found in the graves at Armatova provide some clues about the people buried in them. That they were pagan, as one would expect, is suggested by the coins found in Graves 6, 11, 13, and 19, which were probably to pay Charon for passage to the underworld (those in Graves 6 and 11 were found behind the skulls and had probably been placed in the mouths). The relatively simple glass vessels are of types which were widespread throughout the Roman Empire. Almost all the other objects have a strongly local

character. The lamps (with the exception of **E22**) are fairly closely related to Corinthian lamps, but there is no exact correspondence. The makers' names on **E23** and **E24** have not been found at Corinth (or Athens), and that they should appear retrograde is a clumsy touch. Probably all the lamps found in graves (and possibly **E55** and **E56**) were made in Elis or at least somewhere in the Peloponnese other than at Corinth. The pottery is closely related to the lamps in fabric and was clearly also made locally. The molded bowl **E27** must be one of the most inept ever produced. A summary list of grave goods is given after the description of each grave. The grave goods are described in detail in the catalogue, which follows the descriptions.

SOUTHWEST GROUP, Ill. 23

GRAVE 6 (Pl. 11:d)

Tile grave, partly collapsed; presumably earlier than Grave 7 (*q.v.*), the preparation for which may have caused the collapse. Aligned roughly north-northeast-south-southwest. Max. interior L. 1.00 m., W. 0.50 m. The burial was made in a shallow pit, which was then roofed over with fragments of curved roof tiles.

Single skeleton, probably a child, extended on back, head to south (near corner of grave).

Six offerings. Immediately beside left side of skull, a coin (**E12**); immediately beside right side of skull, a glass flask (**E17**). Near feet, a bowl (**E29**), upright, containing a glass jar (**E21**) and a lamp (**E23**) and surmounted by another bowl (**E28**).

The coin **E12** gives an earliest possible date for interment of A.D. 198. The other offerings are compatible with a date at the very end of the 2nd century or in the early 3rd century after Christ.

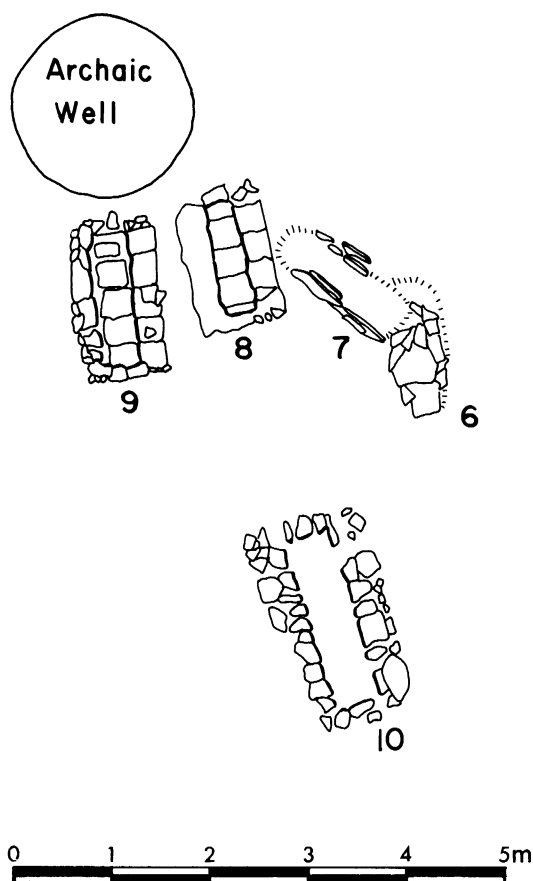
GRAVE 7 (Pl. 11:e)

Tile grave, partly destroyed. Presumably later than Grave 6, which is adjacent but at a slightly lower level; later disturbance where the two come together makes it impossible to be sure. Aligned northwest-southeast; max. interior L. 1.50(?) m., W. 0.40 m. Earth floor. Sides and cover of curved roof tiles which had mostly disappeared.

Single skeleton, extended on back, with head (missing) to southeast.

The single offering preserved, bowl **E27**, was placed upright between the thighs. An uncatalogued iron ring (AO.43; D. 0.033 m.) found near by may have originally also been an offering.

The bowl **E27** cannot be closely dated, but the dating of Grave 6 suggests that Grave 7 should be dated to the early or mid-3rd century after Christ.



ILL. 23. Plan of Area F 2: Cemetery, southwest group

GRAVE 8 (Pl. 12:a)

Walls built of flat tiles with cement mortar. Aligned roughly north-northwest-south-southeast; max. interior L. 1.00 m., W. 0.34 m. Floor of flat tiles. Cover missing, H. pres. 0.14 m.

Only a few bone fragments (child?); position of body indeterminate.

Four offerings. At north end, a jug (E36) and a plate (E26), within which was a lamp (E25); near south end, a glass flask (E18).

The offerings suggest that interment took place in the early or mid-3rd century after Christ.

GRAVE 9 (Pl. 12:b)

Walls built of flat tiles, with cement mortar; aligned roughly north-northwest-south-southeast; max. interior L. 1.25 m., W. 0.35 m. Floor of flat tiles. Cover missing, H. pres. 0.18 m.

Single skeleton, extended on back, head to north, left foot crossed over right.

Two offerings placed by feet, a lamp (E24) and a jug (E33).

The offerings are compatible with a date of interment in the early or mid-3rd century after Christ.

GRAVE 10 (Pl. 12:c)

Walls built of rough stones and occasional flat tiles; construction probably similar to Grave 13 (see pp. 128–129 below). Aligned roughly north-northwest–south-southeast. Interior L. 1.70 m., W. 0.44 m. Earth floor. Cover missing, H. pres. 0.44 m.

Two skeletons, both extended on back with head toward south, one immediately above the other. The upper skeleton, an adult, is slightly bent at the pelvis, and the skull is near the corner of the grave. Arms at sides with hands resting on pelvis. There was no evidence to indicate whether there was an interval of time between the two burials.

A bowl (E31) rested on its side between the ankles of the upper skeleton. Nearer the north end of the grave were fragments of a second vessel, uncatalogued (F-30).

NORTHEAST GROUP, Ill. 24

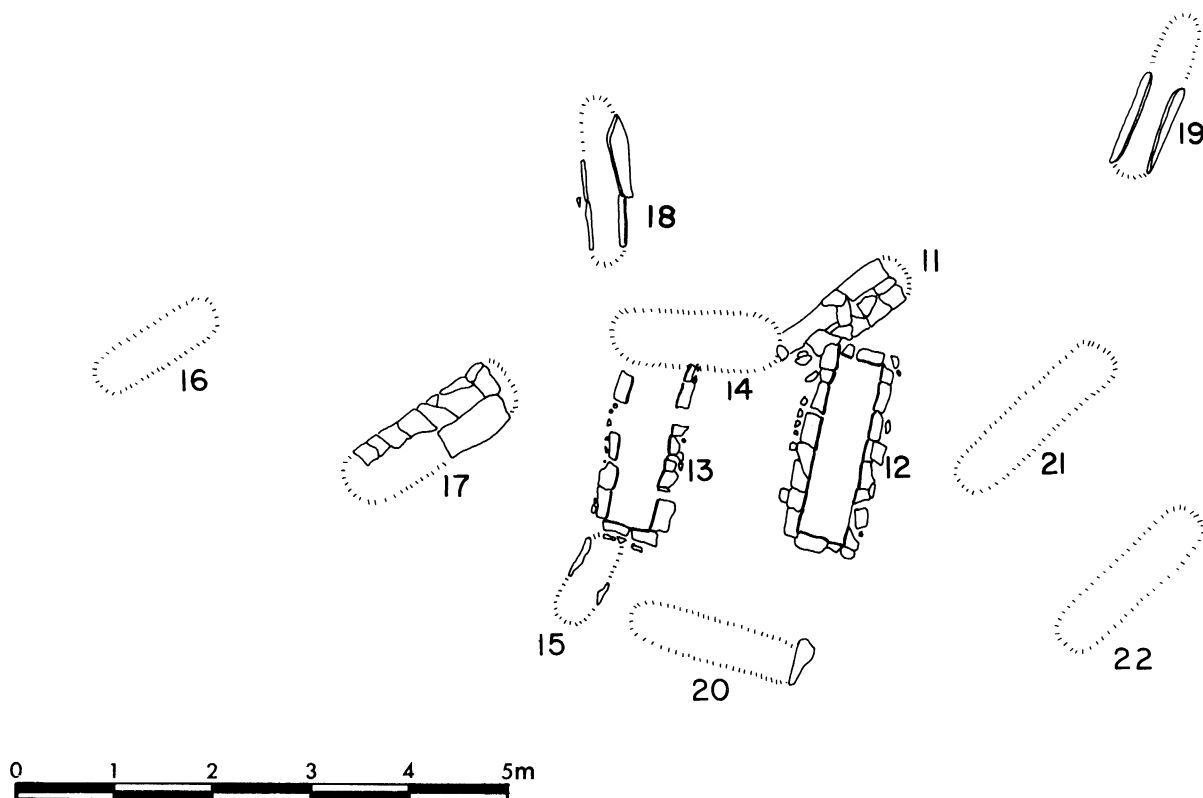
GRAVE 11 (Pl. 12:d, e)

Tile grave. Partly overlapped by Grave 14 to the west and Grave 12 to the south and therefore earlier than them both. Aligned roughly northeast–southwest. L. (burial) 1.50 m., L. (tile cover) 1.30 m.; W. 0.50 m. Earth floor. Most of burial area covered by large pan tiles, placed to form an arch; the northern end left uncovered (Pl. 12:d).

Two burials. The later, that of an adult, in more or less natural order: extended on back, head to southwest, hands at sides. The skull and a few bones of an earlier burial were found at the northeast end of the grave, which was not covered by the tiles; presumably the earlier burial was swept aside, or the grave was only partly disturbed, at the time of the later burial.

A jug (E39) found beside the skull at the northeast end of the grave probably belongs to the earlier burial. A coin (E14) found beside the skull at the southwest end of the grave belongs to the later burial.

The coin provides a *terminus post quem* of A.D. 117 for the later burial, and the relationship of this grave with Grave 12 provides a *terminus ante quem* of the early or mid-3rd century after Christ.



ILL. 24. Plan of Area F 2: Cemetery, northeast group

GRAVE 12 (Pls. 11:f, 12:f)

Walls built of flat tiles (e.g. Pl. 48) with cement mortar. At a higher level than and overlapping Grave 11 to the north, and therefore later. Aligned roughly north-northwest-south-southeast. Interior L. 1.80 m., W. 0.40 m. Floor of white pebbles. Cover missing, H. pres. 0.40 m.

Single burial of adult, extended on back. The skull, which was toward the south, and the neck and shoulder bones had completely disappeared; whether this was due to later disturbance or accident of preservation was unclear. Arms at sides.

Two jugs (E34, E37) beside left foot. Metal fragments, uncatalogued, perhaps part of other offerings.

The offerings suggest a date of interment in the early or mid-3rd century after Christ.

GRAVE 13 (Pls. 11:f, 13:a)

Lower walls built of rough stones, the upper courses of flat tiles, some with grooved decoration. Earlier than Grave 14, which is adjacent to the north (see below). Stratigraphic

evidence lacking for chronological relationship with Grave 15, which is adjacent to the south and at a somewhat higher level. Aligned north-northeast–south-southwest, interior L. 1.70 m., W. 0.45 m. Earth floor. Cover missing, H. pres. 0.40 m.

Single skeleton of adult, extended on back, head to south, arms at sides.

Bronze coin (E11) beside left tibia; bronze dipper (E15) beside left elbow; jug (E35) next to left ankle.

The coin provides a *terminus post quem* for the burial of ca. A.D. 195; it probably took place in the first half of the 3rd century after Christ.

GRAVE 14 (Pl. 11:f)

Pit or tile grave, partly lost. Immediately adjacent to Grave 13 to the south. Grave 14 is at a higher level and is almost certainly later than Grave 13 since otherwise, when the north wall of Grave 13 was built, there would have been greater disturbance than is apparent. Also adjacent to Grave 11 to the east; Grave 14 is clearly later than Grave 11 since it is at a higher level and partly overlaps Grave 11. Aligned east–west. L. ca. 1.70 m., W. ca. 0.40 m. Earth floor. The burial was perhaps originally covered with tiles, to judge by a small fragment near the feet.

Single skeleton of adult, extended on back, head to west, lower left arm folded over abdomen.

A jug (E40) near feet. A bronze object (E48) found near head may also have been an offering.

GRAVE 15 (Pl. 11:f)

Tile grave, partly destroyed. At a somewhat higher level than Grave 13 to the north but the chronological relationship is not clear. At about the same level as Grave 20 to the east and presumably about contemporary. Aligned roughly northeast–southwest. L. 1.00 m., W. 0.44 m. Earth floor. The burial was covered with curved roof tiles, which had mostly disappeared.

The skeletal remains had completely disintegrated; the burial was presumably that of a child, to judge by the dimensions of the grave.

No offerings found.

GRAVE 16 (Pl. 13:b)

Burial in shallow pit, partially disturbed. Aligned roughly northeast–southwest. L. 1.70 m., W. 0.50 m. Perhaps originally covered with tiles, many fragments of which were found immediately above (cf. Grave 7).

Single skeleton of adult, extended on back, head to northeast, arms at side.

Two jugs (E38, E41) resting above right side of skeleton; a bowl (E32) beside left foot.

GRAVE 17 (Pl. 13:c, d)

Tile grave. Aligned northeast–southwest. L. 2.0 m., W. 0.60 m. Originally covered by four complete pan tiles (Pl. 13:c), one of which is missing. The tile over the northeastern part of the burial has two lightly incised grooves forming concentric semicircles with base at one of the long edges near the middle; they are so lightly incised that it is uncertain whether they were intended as decoration. Earth floor. The tiles are placed in pairs to form an arch, H. 0.40 m.

Single skeleton of adult, extended on back, head to northeast, arms at sides, hands above pelvis.

No definite offerings. A group of iron tacks (E54) found beside the grave may have originally been offerings (cf. Grave 21, E16).

GRAVE 18 (Pl. 13:e)

Tile grave, partly destroyed. Aligned roughly north–south. L. 1.75 m., W. 0.40 m. Earth floor. Only the lower parts of the pan tiles which covered the body were *in situ*.

Single skeleton of adult, extended on back, head to south, arms at sides, left knee crossed above right.

No offerings.

GRAVE 19 (Pl. 13:f)

Tile grave, partly destroyed. Aligned roughly north-northeast–south-southwest. L. *ca.* 1.70 m., W. 0.36 m. Earth floor. Burial originally covered by large pan tiles, placed to form an arch, only partly preserved. The skull projected 0.15 m. beyond the tiles at the south end. No tiles were found *in situ* at the north end, but it was not clear whether there had originally been none or whether they had disappeared later.

Single skeleton of adult, extended on back, head to south, hands at side.

Glass unguentarium (E20) about 0.15 m. north of feet. Lamp (E22) near left tibia. Bronze coin (E13); exact position not recorded. Bowl (E30), mended from many sherds; exact position not determinable.

The coin provides a *terminus post quem* for the burial of A.D. 117. The other offerings are compatible with a date in the mid-2nd century after Christ.

GRAVE 20 (Pls. 11:f, 14:a)

Pit or tile grave, partly lost. At roughly the same level as Grave 15 to the west and presumably about contemporary. Aligned roughly west-northwest–east-southeast. L. *ca.* 2.0 m., W. 0.50 m. The east end is clearly marked by an upright stone slab; a fragment of a tile at the other end suggests that the grave may originally have been tile covered.

Skeletal remains of two people. The bones of one, an adult, presumably represent a later burial since they were in more or less natural order: extended on back, head to west,

right hand over pelvis. Only the skull of the other burial, *ca.* 0.10 m. southwest of the first skull, was clearly recognizable during excavation.

No offerings found.

GRAVE 21

Burial in shallow pit. Aligned roughly northeast–southwest. L. 2.20 m., W. 0.55 m. Scattered fragments of curved roof tiles found about 0.30 m. above the earth floor suggest that the pit may have been covered with tiles, which were later disturbed.

Single skeleton of adult, extended on back, head to northeast.

Amphoriskos (**E42**) near bottom of feet. Glass unguentarium (**E19**) beside left tibia. At least 154 nails and tacks (**E16**), mostly concentrated at the southwest end of the grave beyond the feet; a few found

around the periphery of the skeleton and among the fragments of tiles above the skeleton. Cf. the group of tacks (**E54**) found beside Grave 17, which may also have been offerings.

The amphoriskos was probably made in the 1st century after Christ, perhaps well before the end of the century; the unguentarium, however, is like that found in Grave 19, which cannot be earlier than A.D. 117. Grave 21 is perhaps therefore best dated to the early 2nd century and the amphoriskos regarded as something of an heirloom.

GRAVE 22 (Pl. 14:b)

Pit grave. Aligned northeast–southwest. Dimensions indeterminate; L. of better preserved burial 1.70 m.

Two burials. One, that of an adult, in more or less natural order: extended on back, head to northeast, hands at sides. The second represented only by a skull, which rested immediately beside the first skull.

No offerings found.

CATALOGUE: AREA F 2 GRAVES

Unless otherwise noted, all probably date to the 2nd or 3rd century after Christ.

COINS, Pl. 54

BRONZE

E11 (AO.421). Grave 13. Rome. Septimius Severus, probably A.D. 195–196; sestertius. ↑ Obverse: [L SEPT SEV PERT AVG IMP VII] head of Septimius right, laureate. Reverse: [DIVI MP II FPM TRP III COS II PP; in exergue, S C] Roma, helmeted, draped, seated left on low seat, holding an eagle on extended right hand and vertical spear reversed in left hand; in front of seat, round shield. Mattingly, 1950, pl. 24: 6; p. 140, no. 567 (Hall).

E12 (AO.419). Grave 6. Elis. Caracalla, A.D. 198–217. ↓ Obverse: [AYKAIMAYPANTΩNINOC] bust of young Caracalla right, draped, laureate. Reverse:

[HAEI
•ΩN]

within olive wreath. Cf. *SNGCop*, Phlipsis-Laconia, no. 451; American Numismatic Society Collection, E. T. Newell, 10.37 gm.

E13 (AO.423). Grave 19. Elis. Hadrian, A.D. 117–138. ⤴ Obverse: [AYTOKPA-TΩPAΔPIANOC] bust of Hadrian right, draped, head not wreathed. Reverse: [HΛEI-ΩN] Zeus standing right, resting on right leg; in lowered right hand, [fulmen], and on raised left wrist, eagle. Postolaka, 1884, pl. I:8, pp. 20ff; Imhoof-Blumner and Gardner, 1964, p. 72, no. 2.

E14 (AO.420). Grave 11. Elis. Hadrian, A.D. 117–

138. ↓ Obverse: [AYTOKPATΩP-AΔPIANOC] bust of Hadrian left, draped, head not wreathed. Reverse: [H-ΛEI-ΩN] Goddess (Olympia?) standing facing, holding in raised right hand, eagle, and in left, [olive branch]; to left and right below, recumbent river gods (Alpheios and Cladeus?). The god at left holds a branch, the god at right holds a wreath. Dressel, 1904, pl. III:1, p. 61; Postolaka, 1884, pl. II:10.

BRONZE

E15 (AO.355). Pl. 50. Grave 13. Dipper. H. 0.064, D. rim 0.106, L. handle 0.091. Chip missing from handle; worn through in several places. Flat bottom; nearly vertical sides; flaring lip; flat, nearly

horizontal handle with pierced, circular end. Bottom made separately and joined by 19 rivets to body. Rivet heads smoothed on inside. Small patch held on with central rivet about halfway round from handle.

IRON

E16 (AO.297, AO.330). Pl. 50. Grave 21. Group of at least 153 nails and tacks including at least 12 nails with big heads (0.022×0.021 to 0.018×0.017), 12 nails with medium heads (0.019×0.017 to $0.012 \times$

0.011) and 129 tacks (heads 0.012×0.012 to 0.011×0.008). Plate 50 shows a representative selection.

GLASS

E17 (AO.328). Ill. 25, Pl. 50. Grave 6. Flask. Broken and mended. H. 0.14, D. 0.11, D. lip 0.053. Flat, slightly concave bottom, globular body, narrow neck, flaring, irregular lip. Thickened bands at juncture of neck and lip and at outer edge of lip. Parallel ridges on body, diagonal to axis.

E18 (AO.216). Pl. 50. Grave 8. Flask. Broken and mended, rim missing. H. 0.243, W. max. 0.17. Concave bottom; lentoid body; tall neck, tapering in towards top; neck set off from body by a sharp indentation. The neck probably originally terminated in a flaring lip.

E19 (AO.329). Ill. 25, Pl. 50. Grave 21. Unguentarium. Broken and mended. H. 0.16, D. base 0.045, D. lip 0.023. Very concave bottom; conical body, tall cylindrical neck, flaring, rolled lip.

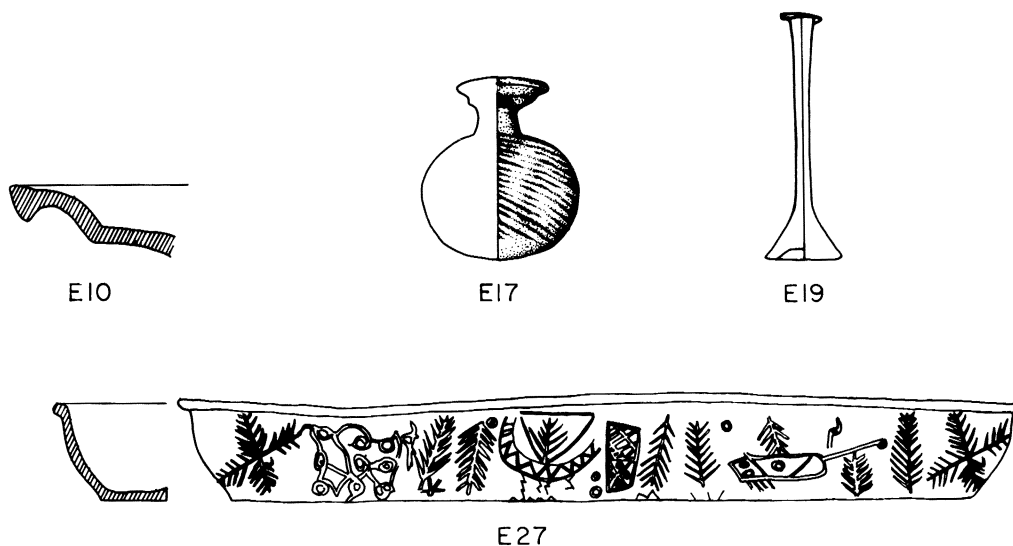
E20 (AO.382). Pl. 50. Grave 19. Unguentarium. Like preceding. Broken; only part shown in photograph. H. neck 0.113, D. base 0.004.

E21 (AO.327). Not illustrated. Grave 6. Jar(?). Broken and fragmentary. Ring torus foot, D. 0.037, concave beneath; body and neck uncertain.

TERRACOTTA OTHER THAN POTTERY

LAMPS, Pl. 50

Light-brown fabric, sometimes pinkish or yellowish. The clay resembles that of the pottery. **E22** is probably the only imported lamp.

ILL. 25. Roman pottery and glass. Scale 1:5, except **E10** 2:5

E22 (AO.353). Grave 19. H. 0.032, L. 0.112, W. 0.073. Center of discus missing. Light yellow-brown fabric, orange-brown glaze. Rim plain, separated from discus by single groove. Volutes from groove to nozzle, enclosing small, rectangular air-hole. Molded handle with two grooves on upper part; bottom outlined by single groove. Discus: gnarled tree on left, probably with human figure beside it; animal with long tail at right, facing left. Cf. Broneer, 1930, Type XXIV (= *idem*, 1977, Type XXIV A). For a scene with dog, bear, and tree on a later lamp, cf. Walters, 1914, no. 1073.

Second half of 1st century or early 2nd century after Christ. The discus was evidently broken before it was deposited in the tomb.

E23 (AO.312). Grave 6. H. 0.033, L. 0.114, W. 0.078. Slightly chipped. Pink-brown fabric, light gray at core. Rim plain except for panels comprising three perpendicular grooves at either side. Small, round nozzle, continuous with rim. Molded handle with two shallow grooves. Discus, outlined by two grooves, badly worn: figure with outstretched arms; unidentified shape at lower right; oil-hole to left of figure; air-hole at edge opposite nozzle. The subject

is possibly the same as, or similar to, that of Broneer, 1977, no. 2828 (probably a sacrificial scene). Bottom slightly concave with relief inscriptions, retrograde, in two rows: ΟΥΛΙΑΝΟΥ.

Cf. Broneer, 1930, Type XXVII, group 3 (dated to the mid-2nd century or early 3rd century: *ibid.*, pp. 93–98; Perlzweig, 1961, p. 8) and some lamps of Type XXVIII (e.g. Broneer, 1930, no. 1124). The maker's name is not attested in Broneer or Perlzweig. For the general form, cf. Walter, 1958, fig. 52:d, e (Olympia, late 2nd and early 3rd centuries after Christ).

E24 (AO.45). Grave 9. H. 0.031, L. 0.102, W. 0.085. Yellow-brown fabric; worn surface, probably originally covered with dull gray-brown paint. Rim outlined by ridge, separated from discus by double ridge; panels (not in relief) set off by ridges at either side; nozzle set off by diagonal ridges; molded decoration of closely spaced dashes. Handle with shallow grooves. Discus: rosette of 16 overlapping petals; rope pattern around central oil-hole; air-hole at edge opposite nozzle. Flat bottom outlined by two ridges; relief inscription, retrograde:

ΝΕΙΚΕΙΡΩΤΟC

Cf. Broneer, 1930, Type XXVII, Group 3 (especially no. 700) and some lamps of Type XXVIII (e.g. no. 1088). The rim pattern of dashes apparently does not occur on Attic or Corinthian lamps. The maker's name is not attested in Broneer or Perlzweig.

E25 (AO.495). Grave 8. Fragment. H. 0.033, D. est. 0.105. Brown fabric. Rim with small, closely spaced raised dots (probably produced by stamping rather than in the mold). Discus, which is not sharply set

off from rim, with larger and less closely spaced raised dots. Bottom with raised rings. Molded handle with grooves extending from top to bottom. For the general shape, cf. Broneer, 1930, Types XXVII and XVIII. The crude decoration appears to be without exact parallel; it may be an attempt to imitate "imbricated leaf design" (Howland, 1958, Types 55 and 56) or globules (e.g. Perlzweig, 1961, no. 141).

POTTERY

All the pottery was probably locally made. The fabric is generally fairly fine and light brown in color. A few pots have a coating of light brown or dark brown paint. All except **E27** are wheelmade, and many have fairly deep wheel marks, especially on the inside. The comparisons cited below suggest that all the pottery, with the possible exception of **E42**, may be dated to the 2nd and 3rd centuries after Christ. **E42** may be of the 1st century after Christ; cf. the general discussion of the cemetery above.

PLATE

E26 (AP.3). Pl. 51. Grave 6. Complete; mended. H. 0.031, D. 0.157. Completely coated with orange-brown paint. Flat bottom. Small, deep indentation at center of inside (from stacking in kiln?). Cf. Walter, 1958, fig. 47:a (dated on p. 65 to the late Antonine period).

MOLDMADE BOWL

E27 (AP.1). Ill. 25 (profile and developed drawing), Pl. 51. Grave 7. Complete except for chips; mended. H. 0.07, D. 0.172. Concave bottom; irregularly spreading sides; uneven rim with rounded lip, thickened toward the outside. Relief decoration, made in mold. Bottom: crossed branches (ferns?) with ends extending a little up sides; circles in each quadrant; zigzag near edge in one quadrant. Sides: branches, crossed or in pairs (oriented in opposite directions), alternating with other objects, crudely rendered in a more or less abstract form. The most noteworthy of

these objects, near the center of the drawing in Illustration 25, is probably intended to represent a ship with sails and perhaps oars. The design includes several circles perhaps as filling ornaments.

Presumably this was a crude local attempt to copy the widely traded relief bowls from elsewhere in the Roman Empire. Those made in Corinth in the 2nd and 3rd centuries (Spitzer, 1942) might have provided a model, although they have more upright walls; some have been found at Olympia (e.g. Walter, 1958, fig. 51).

WHEELMADE BOWLS

E28 (AP.28). Pl. 51. Grave 6. Nearly complete; mended. H. 0.079, D. 0.13. Dark brown coating on surface. Irregular in shape. Small, slightly concave bottom. Groove on outside below lip. Sharp lip with flattened diagonal surface inside and out. Rim pressed out at one point, forming a small spout.

E29 (AP.23). Pl. 51. Grave 6. Complete; mended. H. 0.06, D. rim 0.122. Raised base; angle between

lower and upper body; flat everted rim; slight ridge at inside of rim.

E30 (AP.55). Pl. 51. Grave 19. About three-quarters complete; mended. H. 0.041, D. rim 0.105. Ring foot. Sharp angle and flange between lower and upper body; plain rounded lip. Closely spaced horizontal grooves on upper body. This and the following are local versions of a shape common in finer wares and can be dated roughly to the mid-2nd century after Christ. For the models, see Hayes, 1972, p. 321, form 3; for similar local pieces see Adamshack, 1979, LRB 23 and RC49 (Kenchreai), Williams and Fisher, 1975, pl. 4:5 (Corinth) and Walter, 1958, figs. 32, 33, and 55 (Olympia).

E31 (AP.19). Pl. 51. Grave 10. About one-half preserved. H. 0.091, D. rim est. 0.18. Raised base; sharp angle and slight flange between lower and upper body; everted lip, separated by two shallow grooves from rim, with flattened upper surface, somewhat tilted inward. For the chronology see **E30**. The everted lip is apparently unusual.

E32 (AP.29). Pl. 51. Grave 16. Nearly complete; mended and restored. H. 0.084, D. 0.137. Round bottom with small concavity at center; rounded body; offset rim; grooved handles at either side, from rim to body. Cooking pots of generally similar shape are common throughout the Roman period. A fairly close parallel from Olympia is dated between A.D. 294 and the last third of the 4th century (Walter, 1958, fig. 56, p. 67); another parallel, close in profile but with horizontal handles, is dated to the 1st century after Christ (Williams, 1980, p. 122, no. 16; from Corinth).

SMALL ROUND-MOUTHED JUGS

A shape common at Olympia and Athens in the 2nd and 3rd centuries after Christ, often at Athens with painted inscriptions. Our examples are closest to those at Athens dated by Robinson to the mid- or late 3rd century but may be a little earlier, to judge by the Olympia series (e.g. Eilmann, 1944, p. 82; Walter, 1958, fig. 53) and the example from a grave in Elis dated by the excavator to the 2nd century after Christ (Yialouris, 1977, pl. 126:γ).

E33 (AP.2). Pl. 51. Grave 9. H. 0.099, D. 0.085. Traces of brown paint, inside and outside. Handles with two ridges. Deep, horizontal wheel marks, evidently for decorative effect. Cf. Walter, 1958, fig. 53 (dated on p. 67 to the first half of the 3rd century after Christ); Robinson, 1959, M150, M151 (mid-3rd century after Christ) and M191–M194 (late 3rd century after Christ).

E34 (AP.15). Pl. 51. Grave 12. Handle partly restored. H. 0.103, D. 0.083. Sliced handle; wheel marks like preceding. Robinson, 1959, M194 is very close, but has a more upright lip.

E35 (AP.24). Pl. 51. Grave 13. Nearly complete; mended. H. 0.10, D. 0.082. Sliced handle; wheel marks like two preceding.

E36 (AP.4). Pl. 51. Grave 8. Nearly complete; mended. H. 0.098, D. 0.085. Orange-brown paint outside and on inside of rim. Narrow raised base; offset, flaring rim; ridged handle from rim to shoulder. Cf. Yialouris, 1977, pl. 126 (from a cemetery at Elis dated, p. 197, to the 2nd century after Christ). Robinson, 1959, M147 (mid-3rd century after Christ) is also close in shape; Eilmann, 1944, fig. 57 is similar but squatter.

E37 (AP.14). Pl. 51. Grave 12. Nearly complete; mended. H. 0.094, D. 0.088. Rim less sharply offset than preceding; slight groove on the top of the lip; handle with two grooves.

E38 (AP.26). Pl. 51. Grave 16. H. 0.093, D. 0.084. Light brown paint on outside. Base and rim only slightly set off from body. Sliced handle, set askew. Perhaps manufactured a little earlier than **E33–E37**. Eilmann, 1944, fig. 56, left, is somewhat similar but squatter; it was found in a grave 2 km. east of Olympia together with a lamp and a coin of Hadrianic date (*ibid.*, p. 90, note 4).

ROUND-MOUTHED JUGS WITH HIGH NECKS

E39 (AP.33). Pl. 51. Grave 11. Nearly complete. H. 0.193, D. 0.13. Surface coated with dull brown paint. Low ring foot with flat central projection beneath; sagging body; thickened everted lip, sloping sharply inside to narrow opening. Handle from middle of neck to shoulder.

E40 (AP.25). Pl. 51. Grave 14. Nearly complete; mended. H. 0.123, D. 0.091. Low raised base. Flaring lip, concave on the inside. Grooved handle from rim to shoulder.

SPOUTED JUG

E41 (AP.31). Pl. 51. Grave 16. Nearly complete; mended and restored. H. 0.20, D. 0.15. Concave bottom with tiny knob at center beneath; neck with concave profile separated from shoulder by ridge; rounded rim, thickened outside and pressed into small spout. Handle from below rim to shoulder.

AMPHORISKOS

E42 (AP.30). Pl. 51. Grave 21. Nearly complete; mended and restored. H. 0.154, D. 0.135. Reddish

brown glaze. Ring foot, grooved beneath and separated from body by two grooves. Offset neck, slightly flaring. Handles with two grooves from middle of neck to shoulder. Groove around middle of neck. Ten rows of triangular marks, produced by rouletting or chattering, on upper body.

Cf. Eilmann, 1944, fig. 52, right; the author (pp. 82–84) assigns this vase and the use of this decorative technique to the time before the destruction of Hypokaustenbad IV *ca.* A.D. 100. A jug with somewhat similar decoration is dated by Walter (1958, fig. 39, p. 55) to the middle of the 1st century after Christ.


CATALOGUE: AREA F 2, OBJECTS NOT FOUND IN GRAVES

Many objects were found during exploratory digging above and around the graves of the Roman cemetery. Some were undoubtedly originally associated with graves which later were partially or wholly destroyed (e.g. **E55**, **E56**). Others were earlier than the time of use of this field as a cemetery. The earliest are a few sherds of Archaic date, which resemble the material from the well in this field (Part C above), and a few others probably of Classical date. Next earliest is a series of coins (**E43–E47**) and sherds (e.g. **E57**) of the 4th century B.C. and perhaps later. The sherds suggest that this series does not extend very far, if at all, into the Hellenistic period, but some of the material is almost certainly later than the abandonment of the settlement on the top of Armatova.

The provenience of the finds which are catalogued below is given in accordance with the trenches shown on the plan in Figure 4. Only the most important finds are included.

COINS, Pl. 54

SILVER

E43 (AO.480). Trench 13, northeastern part. Obol of the Arcadian League, struck at Megalopolis, after *ca.* 370 B.C. ↓ Obverse: head of young Pan left with goat horns. Reverse: large  above syrinx; ι (iota) to left. Cf. *SNGCop*, Argolis-Aegean Islands, nos. 197–200; Grose, 1923–1929, II, pp. 469–470, nos. 6930–6933 (the first of which is very close); American Numismatic Society, Jean B. Camman Bequest, April 1955, 0.856 gm.

BRONZE

E44 (AO.426). Trench 13 above Grave 11 (found with **E45** and **E46**). Sikyon, *ca.* 323–251 B.C. → Obverse: head of Apollo right, laureate. Reverse: Σ in olive wreath; in field, [letters]. Cf. *SNGCop*, Phlissia-Laconia, nos. 93–95.

E45 (AO.427). Trench 13 above Grave 11 (found with **E44** and **E46**). Sikyon, late 4th to 3rd century B.C. Poorly preserved. Die position uncertain.

Obverse traces: dove flying left or (if image is reversed) dove feeding right? Reverse: olive wreath; [letters or tripod]. Cf. *SNGCOP*, Phliasia-Laonia, nos. 104–114.

E46 (AO.428). Trench 13 above Grave 11 (found with **E44** and **E45**). Thebes, Federal coinage, ca. 379–338 B.C. ↑ Obverse: head of young Herakles right, wearing lion skin. Reverse: strung bow above club, [ethnic, magistrate]. Cf. *SNGCOP*, Aetolia-Euboea, nos. 359–367.

E47 (AO.425). Trench 13, Extension 4, above Grave 22. Probably Dyme, probably 4th century B.C. or later. ↑ Obverse: head of nymph right; hair rolled, taenia. Reverse: traces: Fish(?) right; above, ΔΥ, below AM; all in olive wreath. Coin not in usual catalogues. Dyme is known to have struck smaller bronzes with Female head/Fish, ΔΥMA below; or Athena head/Fish, monograms; or Demeter head/ΔΥ in olive wreath. Some of the types, especially the first mentioned, seem related to this piece. Cf. *SNGCOP*, Phliasia-Laonia, nos. 143, 144.

BRONZE

E48 (AO.248). Pl. 37:c. Trench 13, Extension 2, near head of burial in Grave 14, but uncertain whether an offering. Pointed object, broken at narrow end. L. pres. 0.062, D. shaft 0.011. Round shaft with conical head. Perpendicular perforation in shaft, D. 0.003 at break.

E49 (AO.212). Pl. 37:f. Trench 13. Fragment of ring. L. pres. 0.021, W. 0.016, Th. 0.002. Rounded longitudinal ridge in center, flanked by grooves. Cf. **E50**.

E50 (AO.213). Pl. 37:f. Trench 13, above or near

Grave 13. Found with **E51**. Fragment of ring. L. pres. 0.029, W. 0.011, Th. 0.005. Similar to **E49** but narrower.

E51 (AO.289). Pl. 37:g. Trench 13, found together with **E50**. Wire loop. L. 0.024, D. wire 0.002. One end turned back on itself; the other perhaps broken. Earring?

E52 (AO.288). Pl. 37:g. Trench 13, Extension 5. Tiny, nearly triangular object. L. 0.008, W. 0.006, Th. 0.004. Perhaps originally used as an inlay.

LEAD

E53 (AO.209). Pl. 37:a. Trench 13, northeastern part. Rectangular weight. L. 0.042, W. 0.038, Th. 0.014–0.01. One surface flat, the other with raised edges and diagonal groove.

IRON

TACKS

E54 (AO.509). Pl. 52. Trench 13, Extension 3, beside Grave 17 but uncertain whether offerings. At least 131 tacks with irregularly shaped heads. Typical dimensions: L. 0.015, heads 0.012 × 0.01, D. shaft 0.004. Plate 52 shows a representative selection.

TERRACOTTA OTHER THAN POTTERY

LAMPS

E55 (AO.244). Pl. 52. Trench 13, Extension 3. Almost complete; mended. H. 0.038, L. 0.14, W. 0.113. Light-yellow fabric. Rim with two grooves and panel at either side. Small rounded nozzle, set off from rim by slightly converging grooves. Molded handle with two grooves. Discus: bust of Serapis, facing right, wearing kalathos; light drapery with many vertical folds extending to neck; over right shoulder, triangular end of outer garment with border shown by grooved lines parallel to edge. Filling-hole to the left; air-hole at edge opposite nozzle. Flat bottom outlined by two grooves with sunken inscription: ONHΣIMOY. The letters are poorly formed.

Close to Broneer, 1930, no. 604 (Type XXVII, Group 3), which has a similar but somewhat smaller bust of Serapis; the major difference is that the Corinthian lamp has ovules on the rim. Busts of Serapis are also known on handles and attachments of lamps found in Asia Minor and Egypt (Walters, 1914, nos. 861–864). The same name, probably the same person as our lampmaker, occurs on a fragment of a lamp of Type XXVII from Corinth (Broneer, 1930, no. 754) and on a fragment of a Corinthian lamp found at Athens (Perlzweig, 1961, no. 308); for

other lamps with the same name, see Broneer, 1930, p. 310 and Perlzweig, *loc. cit.* The name also appears in Latin on Italian lamps (Broneer, 1930, p. 97, note 7).

Late 2nd to early 3rd centuries after Christ.

E56 (AO.245). Pl. 52. Trench 13, Extension 4, to the north of Grave 22 and at a higher level. Almost complete, mended. H. 0.031, L. 0.098, W. 0.073. Yellow-brown fabric. Rim outlined with one groove at outside edge, two at inside; panel at either side. Small, rounded nozzle set off from rim by slightly converging grooves. Molded handle. Discus: half figure of satyr, facing left, wearing chiton and cloak; possibly wreathed; thyrsos in left hand; right hand indistinct, probably raised to mouth. Filling hole at upper right. Flat bottom outlined with groove with sunken inscription: O[---^{ca. 8-10}---]Y. The signature may possibly be restored as OΛYMPIANOY. At least five similar lamps are known with this name: Bruneau, 1971, p. 464, nos. 18, 19 and others there cited.

Cf. Broneer, 1930, Type XXVII, Group 3. Close to Walters, 1914, no. 1219, which has a satyr similarly posed; a major difference is that the latter has ovules on the rim.

Late 2nd to early 3rd centuries after Christ.

POTTERY

E57. Pl. 52. Fragment of a red-figured vessel, probably a krater since glazed inside. H. pres. *ca.* 0.04. Subject uncertain, perhaps buttocks and parts of legs and skirt of a dancer. Figure painted directly on re-

served clay ground, the "legs" and "buttocks" in white and the "skirt" in lines of glaze and dilute glaze. Probably second half of the 4th century B.C.

PART F. BYZANTINE OR FRANKISH

Our many trenches on the top of the hill Armatova produced evidence of only one building later than the 4th century B.C., a house dating to the 12th or 13th century after Christ. It was situated on a very slight rise in ground level, somewhat to the north and east of the center of the hill (Trench D13 on Map 4; Pls. 14:c, 15:a). During explorations in and around the house we encountered three graves which evidently predate it, and these may first be briefly described.

GRAVE 23 (Pl. 16:a)

Tile-covered grave of a child, partly destroyed. Found beneath Room(?) 4 (position indicated in Ill. 26). Aligned roughly northeast–southwest. L. 0.95; W. 0.30 (west end), 0.17 (east end). Earth floor. Originally covered by tiles, of which only a few fragments remained, placed at either side to form an arch.

Single skeleton of a child, badly preserved, extended on back, head to southwest.

No offerings.

GRAVE 24 (Pl. 16:b–d)

Tile-covered grave beneath the east end of Room 3 (position indicated in Ill. 26). Earlier than the house, since the earthen floor of the room extended continuously over the grave. Aligned roughly east–west. L. 1.90; W. 0.65. Earth floor with a few white pebbles beneath upper part of body. Covered by three pairs of tiles forming an arch with small fragments of tiles in gaps (Pl. 16:c): at west end two pan tiles; in center two pan tiles (**F22**, **F23**); at east end two cover tiles (e.g. **F28**).

Single skeleton (Pl. 16:d) extended on back, head to west, hands over pelvis.

No offerings.

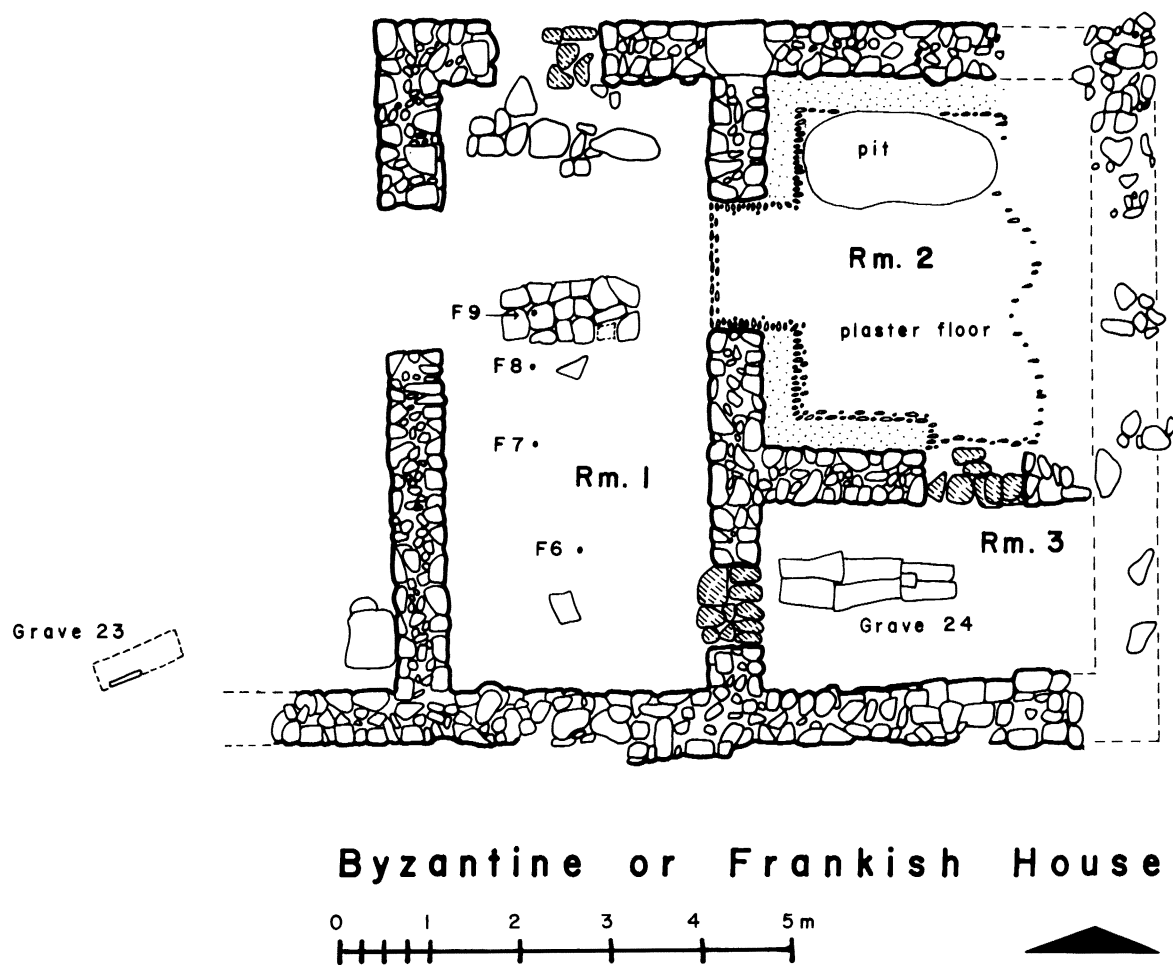
GRAVE 25 (Pl. 16:e–g)

Tile-covered grave discovered in exploratory trench (D12) about 4 meters to the south of the house. Very similar to Grave 24 and presumably about contemporary. Aligned roughly east–west. L. 1.69; W. 0.45. Earth floor. Covered with several layers of whole and fragmentary tiles, loosely overlapping one another (Pl. 16:f, g), including three pans (**F24–F26**) and one cover (**F27**), catalogued below.

Single skeleton extended on back, head to west, arms folded over chest.

No offerings.

The tiles from Graves 24 and 25, which bear a general similarity to those from the house, suggest that the graves do not precede the house by any long span of time. Graves 24 and 25 are also generally similar to Grave 27 in Area A (see below) and to the two tile-covered graves discovered in “Tymbos II” by Themelis (1965, p. 216, no. 7); see parallels cited in catalogue and further discussion in Part G.



ILL. 26. Plan of Byzantine or Frankish House in Area D

HOUSE (Ill. 26, Pls. 14:c, 15, 16:b)

Remains of the house were encountered immediately beneath topsoil. The easternmost part had been much disturbed by plowing or erosion, and the walls are there very fragmentary. The plan (Ill. 26) shows clearly that there were at least three rooms, and possibly a fourth (at the southwest corner). The lower parts of the walls, which were aligned with the cardinal points of the compass, were constructed of unworked stones and occasional fragments of tiles without the use of mortar. The stones were similar to those used in the Classical houses (see Part D above) but were somewhat larger on the average. The upper parts of the walls were probably of mud brick. The walls are preserved to a maximum height of *ca.* 0.70 m.; in most places they stand to a height of 0.45 m. to 0.60 m. Their width is fairly uniform (the south wall of the house is an exception) and averages about 0.63 m. Most of the floors are of packed earth; that of Room 2 is plaster over a packing of small stones. Either the floors were regularly swept or the house was in use for a fairly short time, since there was no significant build-up of deposit.

Above the floors was a layer of debris some 0.30 m. to 0.70 m. deep, comprising stones, many fragments of tiles, and occasional sherds and other objects. The tiles, which number several hundred, clearly fell from the roof when the house was abandoned or destroyed. They are all of rounded, Laconian type except for one fragment of an angular ridge tile. Many, if not all, have simple grooved patterns on their upper surface like **F22–F28**; two or three have more elaborate decoration (e.g. **F29**, **F30**).

Almost all the finds in and around the house may be dated to the period of its use. Occasional objects and sherds contemporary with the Classical settlement on the hilltop, however, were found among the debris and in the topsoil; a few other Classical objects were found beneath the floors.¹

ROOM 1 (Pl. 15:b, c)

Long axis north–south. Interior L. 6.75 m., W. 2.95 m. Broad doorway (W. 1.55 m.) in west wall, probably the main exterior doorway of the house. Slightly narrower doorway (W. 1.40 m.) giving access to Room 2. Another doorway originally gave access to Room 3; it was subsequently blocked with a stone packing (see Room 3 below). There may also have originally been another doorway to the outside through the north wall which was subsequently walled up (see p. 142 below).

Floor of packed earth. Roughly rectangular area, L. (E–W) 1.50 m., W. 0.75 m., paved with flat stones (one removed by mistake), slightly to the north of the center of the room (Pl. 15:c). Immediately to the south is a nearly triangular stone, perhaps a support for a wooden post. Two other stones set into the floor on the main axis, one about 0.75 m. from the south wall, the other adjacent to the south face of the possible staircase at the north end of the room (see p. 142 below), may have been similar supports.

¹ These finds of earlier date are of no apparent significance here, and they are not included in the present catalogue of finds; the provenience of those included in earlier catalogues (i.e. **A50** in Part A above; **D17**, **D219**, and **D230** in Part D above) is given in the description below.

Near the north side of the room is a poorly preserved construction, perhaps the foundation for a staircase (Pl. 15:c). The north wall behind this construction may have originally been pierced with a doorway, subsequently blocked (position indicated in Ill. 26), but the evidence is not conclusive.

The four nails **F6–F9** were perhaps originally hammered into the roof beams, to judge by their size and findspots (see Ill. 26).

Coin, billon: **F1**, found among debris about 0.35 m. above floor level (see Pl. 15:b) near center of room. Iron: **F6–F9**, four large nails, found at or near floor level as shown in Ill. 26; **F12**, one small nail, found 0.30 m.–0.40 m. above floor level about midway between **F6** and **F7**; **F14**, curving fragment, found *ca.* 0.65 m. above floor level in southeast corner. Glass: **F15B**, fragmentary bowl. Terracotta: **F29**,

tile. Pottery, **F31**, **F32**, **F36–F38**, fragments of glazed wares found immediately above floor.

Uncatalogued: one fragment of bronze (D-104), one iron nail (D-70), two other fragments of iron (D-99, D-112), five fragments of glass (D-82, D-85, D-95, D-100, D-101), a fragment of wall plaster (D-105), and fragments of a terracotta tile with grooved decoration, the same as or similar to **F30**.

Room 2 (Pl. 15:d, e)

Nearly square. L. (N–S) 4.10 m., W. 3.65 m. Enough survives of the damaged east wall to indicate its position. Doorway near middle of west side giving access to Room 1. There was evidently a doorway, W. 1.05 m., subsequently blocked with a stone packing, which originally gave access through the south wall to Room 3 (W. *ca.* 0.15 m.; indicated by hatching in Ill. 26). There may have been other doorways through the north wall at the northeast corner and through the east wall, but these walls are damaged and the evidence is lost.

Floor of lime plaster, laid over a packing of small stones. The floor stops short of the north wall, the west wall, and the south wall to the west of the blocked doorway by an average distance of about 0.30 m. This was evidently to accommodate low benches, probably of clay, which have not survived. A few fragments of colored plaster found near these walls suggests that either the benches or the walls above them had plaster surfaces at some time. At the doorway in the west wall the plaster floor gives way to a threshold of packed earth and stones; it appears to have continued without interruption right up to the east wall.

At the north side of the room there is a roughly oval area, *ca.* 2.1 (E–W) × 0.85 m., where the floor is missing (indicated as “pit” in Ill. 26). Immediately to the south and parallel to this area is an oval depression in the floor *ca.* 2 (E–W) × 0.90 m. (not indicated in Ill. 26). The depression has a maximum depth of *ca.* 0.15 m. Nothing was found within these two irregularities in the floor to suggest a reason for their existence.

Coin, bronze: **F4**, found near northeast corner about 0.05 m. above the floor level. Pottery: **F33** and **F35**, fragments of glazed wares, found 0.10–0.20 m. above the floor.

Uncatalogued: one fragment of bronze (AO.274), one iron nail (D-106), two pieces of painted plaster (D-210, D-214).

Room 3 (Pl. 16:b)

Small rectangular room. L. (east–west) probably *ca.* 3.7 m., W. at west end 2 m. Only a few stones were found to indicate the position of the east wall. The south wall is canted a little toward the north near the southeast corner. A doorway, W. 0.80 m., through the middle of the west wall originally gave access to Room 1; it was subsequently blocked with a stone packing, which rested at a level about 0.25–0.30 m. above that of the bottom of the wall on either side (hatched in Ill. 26; visible in Pl. 16:b, c). There was probably a second doorway through the north wall, also subsequently blocked (see Room 2 above). No evidence survives to indicate whether there was a doorway through the almost completely missing east wall.

Grave 24, which predates the house, was discovered beneath the east end of Room 3; see p. 139 above.

Coin, bronze: **F3**, found among the surviving stones of the east wall.

Uncatalogued: two fragments of glass (D-83).

Room(?) 4

Room or area at the southwest corner of the house used for cooking and storage. Bounded to the east by the west wall of Room 1 and to the south, in part at least, by the south wall of the house. This wall continued for at least 1.4 m. beyond its junction with the west wall of Room 1; it is uncertain whether it continued any further west (see below). The distribution of pottery suggests that the room or area continues northward for a distance of about 2 meters from its southern boundary and about 4 meters westward from its eastern boundary, but no walls or clearly defining features were found on the north and west sides.

Many traces of burning indicated that there was a hearth next to the south wall about 0.90 m. west of the east wall; it had perhaps been built of stones, but no evidence survives of it except for the location. The existence of a hearth suggests that the area may have been covered by a roof, perhaps a shed roof. Immediately to the west of the hearth was a shallow pit (Depth *ca.* 0.25 m.). The large flat stones beside the east wall (Ill. 26) may have been used as a table or work surface. Two pots (**F40**, **F41**) were found within the line of the south wall to the west of its end as preserved. They suggest that the wall did not originally extend further than is indicated by broken lines in Illustration 26; disturbance may have been considerable here, however, and this reconstruction should be regarded as tentative.

Stone: **F15A**, button, found near south edge of the shallow pit. Glass: **F21**, fragment, found about 0.60 m. northwest of the shallow pit. Terracotta: **F30**, fragments of decorated tile. Pottery: **D219**, Classical lekythos (see Part D above), found about 0.50 m. west of the west end of the south wall as preserved; **F39**, cup, **F40**, spouted jar, both found about 0.60 m. west of the west end of the south wall as preserved; **F41**, jug or amphora, found about

1.15 m. west of the west end of the south wall as preserved; **F42**, large amphora, found near northwest edge of area; **F43–F48**, fragments of four or more other similar amphorae, found around the hearth and shallow pit and to the north and west of them.

Uncatalogued objects: one of bronze (D-118), one iron nail (D-69), one of glass (AO.215).

UNSTRATIFIED

The following objects were found near the surface or outside but near the house.

Coin, bronze: **F2**, found near the surface above Room 3. Bronze: **D17**, ring, found 0.25 m. north of north wall of Room 1; probably Classical (see Part D above). **F5**, found near surface beside the northwest corner of the house). Iron: **F10**, found near surface above Room 1; **F11**, found near surface to the north of Room(?) 4; **F13**, found near surface above hearth in Room(?) 4. Glass: **F16**, found near surface above northwest corner of house; **F17**, found near surface to the north of **F18**, found near surface

above west wall of Room 1; **F19**, found near surface to the south of Room(?) 4; **F20**, found near surface beside north wall of house. Stone: **A50**, chert blade, found near surface above south side of house; probably of Middle Helladic date (see Part A above). Pottery: **D230**, fragment of tall lekythos, found near surface above central part of house, clearly a stray from Classical period (see Part D above). **F34**, found near surface above or immediately to the north of Room 1.

CATALOGUE

COINS, Pl. 54

F1 (AO.418). Room 1. Achaia (Chiarenza). Charles I of Anjou, A.D. 1278–1285. Billon. Denier tournois. D. 0.019.

Obverse: $\dagger \cdot K \cdot R \cdot PRINC' \bar{A} Ch'$ Cross pattée.

Reverse: $\dagger \blacktriangledown CL\bar{A}RENTI\bar{A} \blacktriangledown$ Châtel tournois.

Schlumberger, 1878, p. 315, second and third varieties (pl. XII:16).

F2 (AO.422). Unstratified. Byzantine (uncertain Greek mint). Manuel I (A.D. 1143–1180) or later. Bronze tetarteron. \downarrow D. 0.017; much worn. Irregular shape, almost square. Obverse: **MA** Manuel facing, half-length, wearing crown and loros with frontal panel, holding in right hand labarum, in left a globus cruciger. Reverse: no inscription; cross, radiate, on base and two steps, between \overline{IC} and $[XC]$. Wroth, 1908, pp. 580–581, Type 8, nos. 86–95, esp. 91 or 92 (pl. LXXII:2); Hendy, 1969, p. 122, Type D (pl. 18:7, 8), as Uncertain Greek Mint. It is not certain that this coin, and the two next, were struck during Manuel's reign; their issue may belong to the 13th century.

F3 (AO.482). Room 3. Byzantine (uncertain Greek mint). Manuel I (A.D. 1143–1180) or later. Bronze

tetarteron. \downarrow D. 0.016; much worn. Irregular shape, almost square. Obverse: no inscription; bust of Christ, with cross nimbus, facing, between \overline{IC} and \overline{XC} (both illegible). Reverse: **MAN** Manuel standing, facing, holding long cross and globus cruciger (details of costume obscure). Wroth, 1908, p. 578, Type 3, nos. 64–68 (pl. LXX:12, 13) but much cruder; Hendy, 1969, p. 122, Type C (pl. 18:5, 6), as Uncertain Greek Mint.

F4 (AO.505). Room 2. Byzantine (uncertain Greek mint). Manuel I (A.D. 1143–1180) or later. Bronze half-tetarteron. D. 0.014; much worn. Irregular shape, almost square. \uparrow Obverse: no inscription. Bust of Manuel facing, wearing crown with long pendilla; other details obscure. Reverse: monogram



of which only the cross and the Δ and the **M** are visible. Wroth, 1908, p. 580, Type 7, nos. 79–85 (pl. LXX:18, 19), but cruder; Hendy, 1969, p. 121, Type A (pl. 18:1, 2), as Central Greek Mint, but cruder than any he illustrates.

BRONZE, Pl. 37:f

F5 (AO.435). Unstratified. Fragment of plating. L. pres. 0.023, W. 0.02, Th. 0.001. One end with three perforations, the other missing; deep slot in middle, perhaps original.

IRON, Pl. 52

NAILS

F6 (AO.439). Room 1 (findspot shown in Ill. 26). L. 0.104. Rectangular shaft, tapering towards point; flat head, square in plan.

F7 (AO.440). Room 1 (findspot shown in Ill. 26). L. 0.99. Similar to preceding but with head round in plan.

F8 (AO.270). Room 1 (findspot shown in Ill. 26). L. 0.129. Probably round in section, but corroded; irregularly shaped head.

F9 (AO.271). Room 1 (findspot shown in Ill. 26). L. 0.105. Similar to preceding.

F10 (AO.277). Unstratified. Missing point. L. pres. 0.043. Square shaft; conical head, leaf-shaped in plan.

F11 (AO.278). Unstratified. Missing point. L. pres. 0.037. Square shaft; rounded head, irregular in plan.

F12 (AO.203). Room 1. Missing point. L. pres. 0.035. Rectangular shaft; rounded head, rectangular in plan.

OTHER OBJECTS

F13 (AO.208). Unstratified. Hook. Ends missing. L. pres. 0.044. Circular in section.

F14 (AO.256). Room 1. Fragment of ring? Broken at both ends. D. est. 0.03, W. 0.008, Th. 0.004. Thick band with ridges at either edge.

STONE

F15A (AO.280). Ill. 27, Pl. 20. Room(?) 4. Button. Intact. H. 0.016, D. max. 0.025, D. perforation 0.007. Blue-gray stone. Conical with rounded edges, somewhat flattened on one side. Decoration of

incised lines; circle around hole at narrow end; four groups of vertical or slightly diagonal lines on sides. Cf. Davidson, 1952, nos. 2593–2621.

GLASS, Pl. 53

F15B (AO.499). Room 1. Fragments of bowl. D. rim est. 0.16, D. bottom est. 0.12. Yellow. Flat bottom; rounded profile; rolled rim, thickened on outside. Ridges on outside 0.015 below rim; attached just above this was a round horizontal handle.

FRAGMENTS (all unstratified except **F21**)

F16 (AO.217). Bottom. Green. Deeply concave beneath, probably an open vessel.

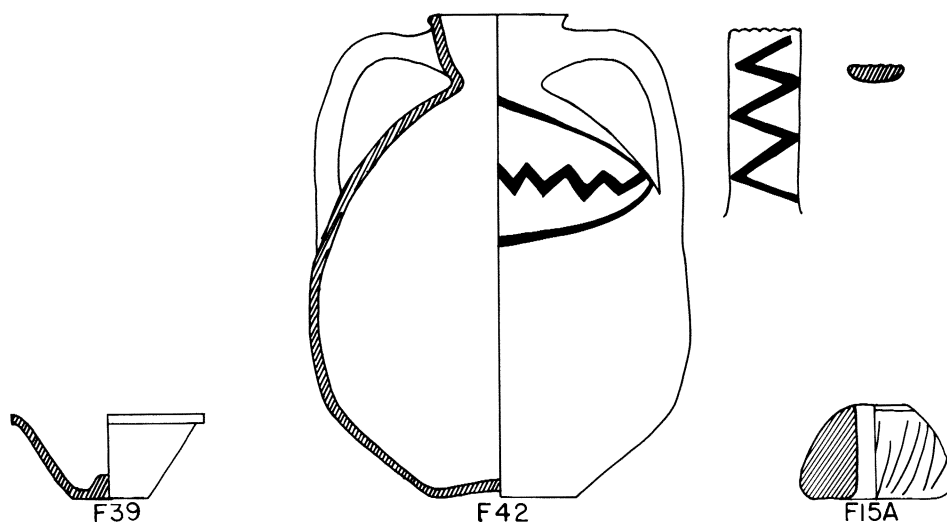
F17 (AO.283). Bottom. Green. Slightly concave beneath.

F18 (AO.284). Green, leaf-shaped attachment of twisted, rising, horizontal handles.

F19 (AO.246). Green. Rounded attachment of probably vertical handles.

F20 (AO.247). Yellow. Fragment of lid(?). Concave on the top, with low knob.

F21 (AO.496). Room(?) 4. Green. Solid stem of goblet.



ILL. 27. Byzantine or Frankish pottery and stone button. Scale 1:5, except **F15A** 2:5

TERRACOTTA, Pl. 52

TILES

All are of fairly coarse fabric and are rather crudely made and irregular. For the decoration cf. tiles from Grave 27 (Part G) and from tile-covered burials in "Tymbos II" (Themelis, 1965, pl. 248:β). Cf. also examples from burials at Olympia, from the Basilica at Glykys in Epeiros (some from burials), and from elsewhere, all of which are discussed further in Part G below.

PANS

All have grooved decoration, probably made by fingers, on upper surface.

F22. Grave 24. L. 0.61, W. 0.38, 0.32. Three straight parallel grooves at broader end and three shallower grooves parallel to axis.

F23. Grave 24. L. 0.65, W. 0.35, 0.30. Three

curving grooves at broader end; impressions of a dog's paws.

F24. Grave 25. L. 0.57. Groove parallel to broader end; four shallow, wavy grooves.

F25. Grave 25. Similar to preceding.

F26. Grave 25. L. 0.65. Three arching grooves at broader end.

COVERS

F27. Grave 25. Two wavy grooves at broader end.

F28. Grave 24. L. 0.61, W. 0.25, 0.19. Three arched grooves at broader end.

F29. Room 1. Two broad grooves parallel to each edge and to end; two groups of four finer grooves (from a toothed instrument?) in wavy lines parallel to the axis.

F30 (AO.350). Room(?) 4. Two fragments of a tile decorated with groups of five parallel grooves.

POTTERY

Glazed Wares, Pl. 53

This comprises only a very small percentage of the pottery. Only fairly small fragments were found, presumably from pots broken before the house was abandoned. All those in the catalogue except **F34** were found imbedded in or immediately above the floors.

F31. Room 1. From wide, fairly flat shoulder, probably a jug. Green dots on dark green-brown background.²

F32. Room 1. From rim with zigzag lip. Green glaze.

F33. Room 2. Rim of shallow bowl or plate. Outside plain; inside with fine design in sgraffito technique; pale yellow glaze.

F34. Unstratified. Shallow bowl or plate with design in sgraffito technique; white glaze.

F35. Room 2. Rim of plate. Concentric circles in sgraffito technique; dark yellow glaze.

F36. Room 1. Small grooved vertical handle.

F37, F38. Room 1. Sherds with glaze on inside.

Plain Ware

This comprises most of the pottery found in the house. The fabric varies from fine (e.g. **F40**) to fairly coarse and is normally red or brown in color. The exterior was smoothed, and more or less pronounced horizontal grooves, produced on the wheel, were often left on the outside, perhaps for decoration (especially prominent on the large amphorae **F42–F48**). Many pots also bear traces of painted geometric designs in a dull, dark red or brown paint and would fall within the definition of the Matt Painted class at Corinth (MacKay, 1967, pp. 279–285); the patterns appear usually to have been fairly sparse and simple, but that they can become quite elaborate on smaller vessels is shown by **F40**. This pot bears considerable resemblance to those in the so-called “Protogeometric” Matt Painted Ware identified as Corinthian (*ibid.*, pp. 285–288). The chronological implications of these comparisons are discussed below.

SMALLER SHAPES

F39 (AP.106). Ill. 27, Pl. 53. Room(?) 4. Handleless cup. Partly missing; mended and restored. H. 0.052, D. rim 0.123. Flat bottom; everted lip, with vertical overhanging projection outside. Bottom rises up on inside to form a knob. Side pierced with three or more round holes of uncertain purpose.

F40 (AP.27). Pl. 53. Room(?) 4. Spouted jar. Missing rim. H. to top of spout 0.165, D. 0.12. Disk base, rounded outside; ovoid body; cylindrical neck; high tubular spout placed obliquely on shoulder, tapering slightly toward flaring lip. Large ridged handle from shoulder to neck opposite spout; neck and spout connected by strut; spout just above shoulder connected

² For the scheme of decoration cf. Morgan, 1942, fig. 72 and pl. XXIX:a (“dotted slip painted”); our sherd is more carelessly decorated than these examples and may belong to Slip Painted ware (Type II) as defined by MacKay (1967, p. 262), which is said sometimes to have “dashes and spots”, and which she dates to “the first half of the thirteenth century” (*loc. cit.*).

to body by small, narrow, sliced handle placed opposite large handle. Horizontal grooves: one at junction of base and body; one on shoulder below handle; five at base of neck. Neck slightly flaring toward top with pair of horizontal ridges on outside. Ridge around the spout slightly above middle.

Decoration in thick, matt brown paint, worn and partly illegible on body. Shoulder: on one side a pair of crosshatched triangles; on the other a crosshatched triangle and two vertical rows of small circles with dotted centers. The rows of circles are framed by vertical lines on one or both sides. Upper body: pendent concentric semicircles beneath the triangles on shoulder (the crosshatching extends to the innermost semicircle) and the spout; possible also beneath handle but worn. Upper part of neck: vertical stripes. Spout: on one side near bottom four rows of running chevrons, on the other side diagonal strokes; upper part illegible; stripes inside lip. Large handle: a row of crosses on either side of ridge. Small handle: a row of crosses. Strut: vertical stripes.

For the spout cf. MacKay, 1967, nos. 87, 88, 90; for the decoration, *ibid.*, nos. 85, 86 (in "Protogeometric" Matt Painted Ware).

F41 (AP.90). Pl. 53. Room(?) 4. Jug or amphora. Missing handle(s) and most of neck; mended and partly restored. H. pres. 0.165, D. 0.148. Flat bottom; ovoid body. Attachment of one vertical handle on shoulder (it is uncertain whether there was a second opposite). Broad groove near base; narrow groove on shoulder. Horizontal ridge on neck near shoulder. Cf. MacKay, 1967, nos. 40, 41.

LARGE AMPHORAE

All those in this catalogue were found in Room(?) 4. They are well fired with fairly thin walls. All, so far as can be ascertained, had simple decoration in matt paint on the shoulders; the decoration is often so worn as to be almost illegible.

Jars of this general shape are found at Corinth from at least as early as the 10th century (e.g. MacKay, 1967, no. 34) until the second half of the 13th century or later (e.g. *ibid.*, no. 80); according to MacKay, those decorated with matt paint "are commonly found in contexts datable through the twelfth and the first half of the thirteenth centuries. The greater number of them are from the second half of the twelfth century. . ." (*ibid.*, p. 280); for the dating see Commentary below.

F42 (AP.104). Ill. 27, Pl. 53. Whole profile preserved; mended and restored. H. 0.325, D. rim 0.08, D. base 0.09. Bottom concave, slightly offset at edge; ovoid body with narrowly spaced wheel marks; slightly flaring neck; lip thickened inside, narrow groove on outside. Strap handles (W. 0.045) with narrow grooves and ridges (cf. **F46**) from shoulder to middle of neck. Decoration in dark, matt red paint; very worn. Shoulder between handles: horizontal wavy line with curving lines above and below. Handle: vertical zigzag.

FRAGMENTS

F43. Pl. 53. Part of neck and upper body. Somewhat smaller than **F42** but generally similar in shape and decoration. Everted lip. Two grooves on lower part of neck.

F44. Pl. 53. Shoulder painted with pendent concentric loops.

F45. Pl. 53. Shoulder painted with concentric loops.

F46. Pl. 53. Handle with grooves and ridges, painted with vertical zigzag (cf. **F42**).

F47, F48. Pl. 53 (photographed from beneath). Typical bottoms: concave, with small plastic knob at center, the bearing surface thickened and rounded.

COMMENTARY

Much of the evidence, when viewed independently, suggests a date for the house some time in the late 12th century or the very early 13th century, i.e. just before the Frankish conquest of the Morea. The pottery has fairly close parallels with Corinthian pottery dated by MacKay to the first half or the middle of the 12th century. The three coins of Manuel I, **F2–F4**, if contemporary, would suggest a *terminus post quem* for the abandonment of the house in the mid-12th century and one thus compatible with the date suggested by MacKay's dating of the Corinthian parallels. The Frankish coin (**F1**), however, poses a problem for such an early date. It might be regarded as a stray which found its way into the house a century or so after its abandonment. This is a distinct possibility. But if we accept it, we must also recognize that the events by which the coin came to be lodged in the debris have left no other recognizable traces; there is no other evidence for any significant activity in and around the house between the time of its abandonment and relatively recent years.

An alternative explanation, and one which I find more probable, is that the house was not abandoned until the late 13th century. Some coins bearing Manuel I's name were still being struck and issued as late as the Frankish period, and one cannot exclude the possibility of the types found at Pylos falling into such a category.³ The most compelling evidence for a 12th-century date, the parallels for **F40**, depends upon MacKay's dating of "Protogeometric" Matt Painted Ware at Corinth to "the first half and middle of the twelfth century" (1967, p. 286). Yet the following considerations suggest that this dating, which is based ultimately on the associated coins, is none too secure.

MacKay publishes seven vessels in "Protogeometric" Matt Painted Ware. One was found with coins of John II (A.D. 1118–1143: MacKay, 1967, no. 86, cf. p. 308, lot 67), three were found with coins of Manuel I (A.D. 1143–1180: *ibid.*, no. 85, cf. p. 286; no. 87, cf. p. 307, lot 21; no. 90, cf. p. 317, lot 378), and one was found with a coin of William Villehardouin (A.D. 1245–1250: *ibid.*, no. 88, cf. p. 320, lot 1237).⁴ The context of the remaining two is not given, presumably because the associated finds were not clearly datable. Since coins give only a *terminus post quem* for the deposit in which they are found, and since coins bearing Manuel I's name continued to circulate in the 13th century after Christ, the chronological evidence from Corinth is as readily compatible with a date in the 13th century as the 12th for the use of "Protogeometric" Matt Painted Ware.

We may now summarize. Our house was clearly not occupied for any great length of time, to judge by the lack of accumulation of habitation debris. Although the coins of Manuel I might allow a date as early as A.D. 1150, it is more likely that the occupation and abandonment of the house occurred more than a century later; i.e. near the end of the 13th century. If this dating is correct, our building is probably to be connected with the Frankish occupation in the Morea and particularly with the establishment of the castle of Chlemoutsi-Ciarenza at near-by Cape Kyllene (Map 1).

³ I owe this observation to Philip Grierson (personal communication).

⁴ The coin is described as "almost certainly not from use fill" by MacKay (*op. cit.*, p. 320), but no reason is given for this statement.

PART G. OTHER GRAVES

Five graves, evidently comprising part of a cemetery, were excavated in Area A, Trenches A1 and A4, beside the easternmost edge of the hilltop (Fig. 1, Pl. 17:b). They were found almost immediately beneath the modern surface, and Graves 26 and 27 are considerably damaged. One grave certainly (27) and another probably (26) were tile covered; two are stone built (29, 30), and one was perhaps a simple interment in a pit (28). None contained any recognizable offerings, and the graves cannot be closely dated, although they are probably of the Late Roman or Byzantine period (see Commentary below).

Evidence of Middle Helladic occupation unconnected with the graves (sherds, chipped stone tools) was also found in the trenches at the eastern end of the hill (see Part A above).

The number assigned to each grave in the preliminary report (Coleman, 1969) is given after the present catalogue number.

GRAVE 26 (formerly 1; Fig. 1, Pl. 17:c)

Very fragmentary burial of a child, aligned east–west. Only the leg bones are preserved, with feet toward the east. A fragment of a tile at the south side suggests the burial was originally tile covered. A flat stone perhaps delineates the grave on the north side. This grave is unconnected with the Minyan kantharos (A2) and the fragmentary storage jars which were found immediately to the east (Pl. 17:c; see Part A above).¹

GRAVE 27 (formerly 3; Fig. 1, Pl. 17:d)

Fragmentary tile-covered grave. Aligned east–west. W. 0.50 m. The pan tile which covered the west end has grooved decoration comprising two wavy lines parallel to the long axis. Other fragments have grooved chevrons near the edge.

Skeleton on back, head to west. Remains of a second skull and other bones found resting against the northwest corner of the cover (Pl. 17:d) are perhaps from another, unconnected interment.

GRAVE 28 (formerly 4; Fig. 1, Pl. 18:a)

Single burial, perhaps in a simple pit. Skeleton on back, head to west, arms folded over abdomen. The head rested beside the easternmost of a row of stones laid flat for a distance of ca. 2.1 m. (of earlier date?).

GRAVE 29 (formerly 2; Fig. 1, Pl. 18:b, e)

Built of stones. Upright slabs for sides. Flat slabs for cover (Pl. 18:e). Aligned east–west. L. 1.94 m., W. interior 0.40 m. Floor of small white pebbles. H. 0.45 m.

Single skeleton on back, head to west, arms crossed over chest.

¹ The statement in Coleman, 1969, p. 156, is erroneous in this respect.

GRAVE 30 (formerly 5, Fig. 1, Pl. 17:e, f)

Similar to Grave 29. L. (east–west) 2.02 m., W. interior 0.45 m., H. 0.30 m.

Single skeleton on back, head to west, arms crossed over chest. The skull had completely disintegrated, probably as a result of the collapse of the westernmost slab of the cover.

COMMENTARY

Graves 26–30 can be dated only within broad limits, given the absence of grave goods or useful stratigraphy. The general similarity of burial customs and the use of similarly decorated tiles suggests the possibility that they are roughly contemporaneous with the three tile-covered burials found in and around the Byzantine or Frankish house (Graves 23–25; see Part F). The construction of the house in the 12th or 13th century provides a *terminus ante quem* for those burials, and the similarity of the tiles to those used to roof the house suggests that the burials may be not much earlier. Several other groups of graves at Armatova can also be mentioned as being generally similar: Graves 3–5 in Area F 3 (Part E, Section 1); five graves built of stones found in “Tymbos I” by Themelis (1965, p. 216, no. 6; see fig. 2 and pls. 245, 246, and 247:a, β); and four graves found in “Tymbos II”, also by Themelis (*op. cit.*, no. 7), including two tile-covered burials (see pl. 248:β, γ) and two graves built of stones (see fig. 3 and pls. 247:δ, ε, 248:a). Grave 5 in Area F 3 and the graves built of stones in “Tymbos I” and “Tymbos II” closely resemble Graves 29 and 30. The tiles used for the tile-covered burials of “Tymbos II” appear to be quite similar to those of Graves 23–25 and Grave 27. Although the grooved decoration on these was not described in detail by Themelis and they were not re-examined during our study of the site, the patterns on the convex surface of the tiles appear from the published photographs to be quite elaborate: there may be grooves or zigzags parallel to one of the shorter sides, and other motifs include a zigzag line forming a large arc (Burial A), lines of linked hooks parallel to the long sides (Burial A), and multiple arcs or arcades (Burial B).

The only identifiable offerings in any of these graves are two undatable bronze rings in Grave 4 (E6, E7) and a jug in one of the tile-covered burials of “Tymbos II” (Themelis, 1965, pl. 248:δ). Although I have been unable to find any parallels at all for the jug, one may safely assume that it was manufactured no earlier than the Late Roman period. The scarcity of offerings in these graves is also in great contrast to the situation in the cemetery of the 2nd and 3rd centuries in Area F 2 (Part E) and suggests that the Late Roman period should be considered a general *terminus ad quem* or *post quem* for all of them. The group of graves in Area F 3 are probably to be dated to the 4th century after Christ at the earliest; the floor of tiles probably from a grave in Trench 6 has a parallel in the 4th century (see Part E, pp. 119–120 above).

The evidence from Armatova itself thus indicates that all the graves in question should probably be dated no earlier than the 4th century and that some may date as late as the 12th

or 13th centuries, and perhaps still later. There is no clear evidence from the site itself for dating them more closely, either in terms of the relationship of one group of graves to another or in absolute terms. One can only guess that the graves in Area F 3 may belong early in this time span, given the coins found in the vicinity, and that the graves in and around the Byzantine or Frankish house belong later, given the similarity of the tiles to those from the house.

External parallels tend to confirm this picture but contribute little towards more precise dating. The tile-covered burials provide the best possibilities for comparisons with other sites. Burials constructed from or covered with terracotta roof tiles occur as early as tiles as used for roofing; see the recent and useful summary of pre-Roman tile graves by Hägg and Fossey (1980, pp. 113–122). At Armatova itself, a badly disturbed tile-covered grave probably of Classical date was found in Area K (Part D, pp. 92–93 above). Grooved decoration somewhat similar to our examples is known on tiles from burials as early as the Hellenistic period, for instance at Asine; in those examples, however, the decoration is limited to simple arcs and bow-like shapes (Backe-Forsberg, 1978, fig. 111; Hägg and Fossey, 1980, fig. 136). Tile-covered burials evidently continued throughout the Roman and Byzantine periods. They are well attested in the 2nd or 3rd century after Christ, not only at Armatova itself (Part E) but also at near-by Elis (Yialouris, 1977, p. 179) and Olympia (Yialouris, 1965). Grooved decoration is not attested in the cemetery of the 2nd and 3rd centuries after Christ at Armatova (Part E), with one possible exception (Grave 17). As at Armatova, the precise dating of Late Roman and Byzantine examples from other sites is difficult because of the scarcity of offerings.

Probably the best parallels for the decorated tiles from the burials in “Tymbos II” are those from tile-covered burials near the new Archaeological Museum at Olympia, which can be seen in the published photographs to have arcs similar to those of Burial B (Yialouris, 1965, pl. 231). They are described as “Palaeo-Christian?” (*ibid.*, p. 207), but no evidence is given for this statement. The best dated parallels come from opposite ends of the time span with which we are here concerned. A tile from a grave at Nea Anchialos with multiple wavy lines on the convex surface near the long edge (Kourkoutidou, 1969, p. 233, pl. 234:δ) is probably to be dated to the 4th century after Christ. And, at the other extreme, tiles from the Basilica at Glykys in Epeiros, found in association both with the church and with burials in and around it, probably date no earlier than the late first or early second millennium after Christ and may date as late as the 14th century, or later (Pallas, 1970, pp. 86–87; 1971, pp. 140–143, pls. 175, 176, and 177:α). Graves 14 and 15 at the Basilica at Glykys (Pallas, 1971, pl. 175) are particularly reminiscent of the tile-covered burials from “Tymbos II” and those from Olympia, both in general appearance and in the decoration of the tiles (*ibid.*, pls. 176:β, γ, 177:α).

Less well dated tiles with grooved decoration are known from a burial at Philia near Karditsa, including an example with an elaborate pattern on its concave surface (Liagouras, 1964, pl. 294:α). The destruction of the Palaeo-Christian basilica at this site evidently provides a *terminus post quem* for the group of burials to which the tile-covered one belongs, but the excavator reports that the burials could be “much later” (*ibid.*, p. 253). Similar, if less elaborately decorated tiles are also known from burials dated generally to Late Roman

or Byzantine times at Dion (Bakalakis, 1964, pp. 409, γ-ε) and Thessaloniki (Petsas, 1960, pl. 308) in Macedonia.

It seems unlikely that any of the tiles used in tile-covered burials at Armatova were made especially for graves at any period. All those used for burials are of appropriate dimensions and materials for use in roofing. The scarcity or absence of evidence for habitation contemporaneous with the late groups of graves at Armatova is noteworthy, but the accidents of preservation and the limited nature of our investigations should not be underestimated.

Clearly, much further work needs to be done on the development and chronology of roof tiles of Late Roman and Byzantine times and their grooved decoration. My general impression about tiles from this time span is that those with simpler decoration are likely to be earlier and those with more elaborate decoration such as were found in Graves 24, 25, 27 and "Tymbos II" are likely to be later.

APPENDIX 1: ANCIENT TESTIMONIA

The few ancient references to Pylos in Elis which are of relevance to its identification and history are given in their entirety below. They are followed by a translation into English and a few remarks explaining the context of the reference. The first two are arranged in the chronological order of the events to which they refer, the rest in the chronological order of the authors.

I. Diodorus Siculus, xiv.17.8–9.

ὁ δ' οὖν Πανσανίας κατ' ἔφοδον τῆς Ἀρκαδίας ἐμβαλὼν εἰς τὴν Ἥλιν Λασίωνα μὲν φρούριον εὐθὺς εἶλεν ἐξ ἔφοδου, μετὰ δὲ ταῦτα διὰ τῆς Ἀρκωρείας ἀγαγὼν τὸ στρατόπεδον τέτταρας πόλεις προσηγάγετο, Θραιστον, Ἄλιον, Εὐπάγιον, Ὀποῦντα. ἐκεῖθεν δὲ τῇ Πύλῳ προσστρατοπεδεύσας εὐθὺς καὶ τοῦτο τὸ χωρίον παρέλαβεν, ἀπέχον τῆς Ἥλιδος σταδίου ὡς ἑβδομήκοντα. μετὰ δὲ ταῦτ' ἐπ' αὐτὴν πορευθεὶς τὴν Ἥλιν ἐπὶ τῶν πέραν τοῦ ποταμοῦ λόφῳ κατεστρατοπέδευσεν.

Pausanias, then, entered Elis by way of Arcadia and straightway took the outpost of Lasion at the first assault; then, leading his army through Akroreia, he won to his side the four cities of Thraistos, Halion, Eupagion and Opus. Moving thence, he straightway encamped near Pylos and took this place, which was about seventy stades from Elis. After this, advancing to Elis proper, he pitched his camp on the hills across the river. (Loeb translation)

The events here related took place during the two-year war between the Spartans and the Eleans variously dated between 402 and 398 B.C. Lasion is generally agreed to be the walled town located in the southwestern foothills of the Erymanthos range (Map 1). The Akroreia is the north-eastern highland of Elis. Thraistos, Halion, Eupagion, and Opous are either known or conjectured to have been situated in the highland. (Wesseling's suggestion of Epitalion for Eupagion, given in most modern texts, is probably incorrect, since Epitalion was near the mouth of the Alpheios [i.e., neither in the Akroreia nor in any more or less direct route from Lasion to Pylos].)

Xenophon's account of the same war (*Hellenika* III.2.21–31) makes no reference to Pylos and is in other ways very different from that of Diodorus. Xenophon makes no mention of a campaign by Pausanias and describes instead a Spartan invasion led by King Agis, which entered Elis from the south. Meyer (1909, pp. 114–116; 1959, col. 2134) suggests that the invasion described by Diodorus was really a plundering expedition carried out by Arcadians (and Achaeans) when news came to them of the success of the invasion of Agis; the Arcadians may have been assisted by Spartans, but Meyer thinks it unlikely that Pausanias took part, at a time when the other Spartan king was already in the field with an army. Another possibility is that both Agis and Pausanias led campaigns on separate occasions and that each historian describes only one campaign. This scenario is less likely, however, given the general similarity of the two accounts in describing operations against the city of Elis itself (cf. Meyer, 1909, p. 116).

II. Xenophon, *Hellenika* VII.4.16.

οὐ πολὺ δ' ὕστερον οὗτοι παραλαβόντες τῶν Ἀρκάδων τινὰς καταλαμβάνουσι Πύλον. καὶ πολλοὶ μέντοι πρὸς αὐτοὺς ἐκ τῆς πόλεως ἀπῆσαν τοῦ δήμου, ἅτε χωρίον τε καλὸν καὶ μεγάλην ῥόμην τὴν τῶν Ἀρκάδων σύμμαχον ἔχοντας.

Not long afterwards these exiles enlisted the aid of some of the Arcadians and seized Pylos. And many of the democrats withdrew from the capital and joined them, inasmuch as they were in possession of a good stronghold and had a large force—that of the Arcadians—to support them.
(Loeb translation)

The events are those of 365/4 B.C. The exiles referred to, as related by Xenophon immediately before this passage, were a group of about 400 citizens of Elis with democratic inclinations who, when they appeared to have support from the Arcadians (with whom Elis was at war), seized the acropolis of their city but were subsequently driven out. For the sequel to these events and further discussion see III below.

III. Xenophon, *Hellenika* vii.4.26

Ὡς δὲ οἱ Ἀρκάδες περὶ τὸν Κρῶμνον ἦσαν, οἱ ἐκ τῆς πόλεως Ἡλείοι πρῶτον μὲν ἰόντες ἐπὶ τὴν Πύλον περιτυγχάνουσι τοῖς Πυλίοις ἀποκεκρουμένοις ἐκ τῶν Θαλαμῶν. καὶ προσελαύνοντες οἱ ἱππεῖς τῶν Ἡλείων ὥς εἶδον αὐτούς, οὐκ ἐμέλλησαν, ἀλλ' εὐθὺς ἐμβάλλουσι, καὶ τοὺς μὲν ἀποκτινύνουσιν, οἱ δὲ τινες αὐτῶν καταφεύγουσιν ἐπὶ γήλοφον. ἐπεὶ μέντοι ἦλθον οἱ πεζοί, ἐκκόπτουσι καὶ τοὺς ἐπὶ τῷ λόφῳ, καὶ τοὺς μὲν αὐτοῦ ἀπέκτειναν, τοὺς δὲ καὶ ζῶντας ἔλαβον ἐγγὺς διακοσίων. καὶ ὅσοι μὲν ξένοι ἦσαν αὐτῶν, ἀπέδοντο, ὅσοι δὲ φυγάδες, ἀπέσφαττον. μετὰ δὲ ταῦτα τοὺς τε Πυλίους, ὥς οὐδεὶς αὐτοῖς ἐβοήθει, σὺν αὐτῷ τῷ χωρίῳ αἰροῦσι, καὶ τοὺς Μαργανέας ἀναλαμβάνουσι.

While the Arcadians were occupied about Kromnos, the Eleans in the capital proceeded in the first place against Pylos, and fell in with the Pylions after the latter had been driven out of Thalamai. And when the horsemen of the Eleans, as they rode along, caught sight of the Pylions, they did not delay, but attacked at once, and they killed some of them, while others fled for refuge to a hill; but as soon as the infantry came up they dislodged those upon the hill also, and killed some of them on the spot and took captive others, nearly two hundred in number. Thereupon they sold all among the prisoners who were foreigners and put to the sword all who were Elean exiles. After this the Eleans not only captured the Pylions, along with their stronghold, inasmuch as no one came to their aid, but also recovered Margana.
(Loeb translation)

The events described in II and III took place during the war of 365/4 B.C. between the Eleans and the Arcadians. Passage II describes the seizure of Pylos by a party of exiles from the city of Elis who had been expelled after unsuccessfully attempting a democratic coup. These exiles were joined by a number of sympathizers from the mother city and were supported by the Arcadians, who at that time were campaigning in Elean territory. Passage III describes the eventual fate of the Elean dissidents and of the Pylions, who evidently gave them considerable support.

The expedition of the Pylions against Thalamai, which is mentioned in III, is not mentioned elsewhere in Xenophon's narrative. The location of Thalamai is itself in doubt, although this passage implies that it was not far from Pylos. Margana is thought to have been situated near the mouth of the Alpheios.

IV. Strabo, viii.3.7.

Μεταξὺ δὲ τῆς τοῦ Πηνειοῦ καὶ τοῦ Σελλήεντος ἐκβολῆς Πύλος ᾤκειτο κατὰ τὸ Σκόλλιον, οὐχ ἡ τοῦ Νέστορος πόλις, ἀλλ' ἑτέρα τις, ἥ πρὸς τὸν Ἀλφειὸν οὐδέν ἐστι κοινώνημα, οὐδὲ πρὸς τὸν Παμισόν, εἴτε Ἀμαθὸν χρὴ καλεῖν. βιάζονται δ' ἐνιοὶ μνηστευόμενοι τὴν Νέστορος δόξαν καὶ τὴν εὐγένειαν· τριῶν γὰρ Πύλων ἱστορουμένων ἐν Πελοποννήσῳ (καθότι καὶ τὸ ἔπος εἴρηται τοῦτι, ἔστι Πύλος πρὸ Πύλοιο· Πύλος γέ μὲν ἐστι καὶ ἄλλος),

τούτου τε καὶ τοῦ Λεπρεατικοῦ τοῦ ἐν τῇ Τριφυλίᾳ καὶ τῇ Πισάτιδι, τρίτον δὲ τοῦ Μεσσηνιακοῦ τοῦ κατὰ Κορυφάσιον, ἕκαστοι τὸν παρά σφισιν ἡμαθόεντα πειρῶνται δεικνύναι, καὶ τὴν τοῦ Νέστορος πατρίδα τοῦτον ἀποφαίνουσιν. οἱ μὲν οὖν πολλοὶ τῶν νεωτέρων καὶ συγγραφέων καὶ ποιητῶν Μεσσήνιον φασὶ τὸν Νέστορα, τῷ σωζομένῳ μέχρι εἰς αὐτοὺς προστιθέμενοι· οἱ δ' Ὀμηρικώτεροι, τοῖς ἔπεσιν ἀκολοθοῦντες, τοῦτον εἶναί φασὶ τὸν τοῦ Νέστορος Πύλον, οὗ τὴν χώραν διέξεισιν ὁ Ἀλφειός· διέξεισι δὲ τὴν Πισάτιν καὶ τὴν Τριφυλίαν. οἱ δ' οὖν ἐκ τῆς Κοίλης Ἥλιδος καὶ τοιαύτην φιλοτιμίαν προσετίθεσαν τῷ παρ' αὐτοῖς Πύλῳ καὶ γνωρίσματα, δεικνύντες Γέρηνον τόπον καὶ Γέροντα ποταμὸν καὶ ἄλλον Γεράνιον, εἶτ' ἀπὸ τούτων ἐπιθέτως Γερήνιον εἰρήσθαι πιστούμενοι τὸν Νέστορα.

It was between the outlets of the Peneios and the Sellëis, near the Skollion, that Pylos was situated; not the city of Nestor, but another Pylos which has nothing in common with the Alpheios, nor with the Pamisos (or Amathos, if we should call it that). Yet there are some who do violence to Homer's words, seeking to win for themselves the fame and noble lineage of Nestor; for, since history mentions three Pyloi in the Peloponnese (as is stated in this verse: "There is a Pylos in front of Pylos; yea, and there is still another Pylos"), the Pylos in question, the Lepreatic Pylos in Triphylyia and Pisatis, and a third, the Messenian Pylos near Koryphasion, the inhabitants of each try to show that the Pylos in their own country is "emathoëis" and declare that it is the native place of Nestor. However, most of the more recent writers, both historians and poets, say that Nestor was a Messenian, thus adding their support to the Pylos which has been preserved down to their own times. But the writers who follow the words of Homer more closely say that the Pylos of Nestor is the Pylos through whose territory the Alpheios flows. And the Alpheios flows through Pisatis and Triphylyia. However, the writers from Koile Elis have not only supported their own Pylos with a similar zeal, but have also attached to it tokens of recognition, pointing out a place called Geranos, a river called Geron, and another river called Geranios, and then confidently asserting that Homer's epithet for Nestor, "Germanian", was derived from these. (Loeb translation)

Strabo, in contrast to most other sources, makes Pylos a masculine noun. The line of hexameter verse he quotes was evidently proverbial and is referred to as early as Aristophanes (*Hippéis*, 1058–1059).

Strabo's account here and elsewhere of the river he calls the Sellëis cannot be squared with geographical facts. If, with most scholars, we identify it with the river called Ladon by Pausanias (VIII, below; see Map 1), which would agree with the statement Strabo makes elsewhere (in VIII.3.5; see below) that the Sellëis flows out of Pholoe (a mountainous region in the eastern part of Elis), then it did not have an outlet to the sea separate from the Peneios (as the first sentence of the present passage implies). If, on the other hand, we follow Meyer's argument (1937; 1959, no. 3) that Strabo's Sellëis is not generally to be identified with the Ladon but rather with some other river which terminates at the coast, then it cannot flow out of Pholoe, nor can Pylos be near Skollion, which is generally agreed to be north or northeast of Agrapidochori (see Appendix 2, footnote 3).

Another passage in Strabo should here be noted, since it is often discussed in this connection. Unfortunately, it does not help us much to understand his views because of a corruption at a vital point in the manuscripts. The text of the passage is question (VIII.3.5) reads as follows:

Μεταξὺ δὲ τοῦ Χελωνάτα καὶ τῆς Κυλλήνης ὁ τε Πηνειὸς ἐκδίδωσι ποταμὸς καὶ ὁ Σελλήεις ὑπὸ τοῦ ποιητοῦ λεγόμενος, ῥέων ἐκ Φολόης· ἐφ' ᾧ Ἐφυρα πόλις, ἑτέρα τῆς Θεσπρωτικῆς καὶ Θεσσαλικῆς καὶ τῆς Κορίνθου, τετάρτη τις ἐπὶ τῇ ὁδῷ κειμένη τῇ ἑπιθαλασσίῳ, ἥτοι ἡ αὐτὴ οὖσα τῇ Βοινῳα (τὴν γὰρ Οἰνόην οὕτω καλεῖν εἰώθασιν) ἢ πλησίον ἐκείνης, διέχουσα τῆς Ἥλειων πόλεως σταδίου ἑκατὸν εἴκοσιν.

It is between Chelonatas and Cyllene that the River Peneius empties; as also the River Sellëeis, which is mentioned by the poet and flows out of Pholoe. On the Sellëeis is situated a city Ephyra, which is to be distinguished from the Thesprotian, Thessalian, and Corinthian Ephyras; it is a fourth Ephyra, and is situated on the road. . . ,¹ being either the same city as Boenoa (for thus Oenoe is usually called), or else near that city, at a distance of one hundred and twenty stadia from the city of the Eleians. (Loeb translation)

At issue here (besides Strabo's geographical error about the location of the mouth of the Peneios) is the corrupt *ἐπιθαλασσίωνα*. If, with Müller (see Meyer, 1937, col. 2240), we read *ἐπὶ τὸν Λασίωνα*, the usual emendation, it would be likely that Strabo has the Ladon in mind for the river he calls the Sellëeis. The alternative reading *ἐπιθαλασσίω* proposed by Kramer (Meyer, *loc. cit.*) would suggest, on the other hand, that Strabo was referring to a river like the Gourlesas (Map 1), which flowed to the sea. The distance of 120 stades from Elis to Ephyra-Oinoe is little help; it is close to the distance by way of the river valleys from Elis to Kulogli on the Ladon (I measure 19.5 km.); however, 120 stades would also be compatible with a coastal site between the outlets of the Peneios and the Gourlesas. Strabo, viii.3.5 cannot therefore be regarded as proving that Strabo had the Ladon in mind in viii.3.7. Strabo's obvious confusion arose because, apparently having no first-hand knowledge of the geography of Elis, he relied on conflicting sources; for further discussion see Appendix 2 below.

It has not been thought worthwhile to quote here other passages in which Strabo mentions Elean Pylos, in the course of arguments that it could not be Homeric Pylos, but gives no further useful geographical or historical information (e.g. viii.3.27; viii.3.29).

V. Pausanias, iv.36.1.

Ἔστι δὲ ἐκ Μοθώνης ὁδὸς σταδίων μάλιστα ἑκατὸν ἐπὶ τὴν ἄκραν τὸ Κορυφάσιον· ἐπ' αὐτῇ δὲ ἡ Πύλος κεῖται. ταύτην ὥκισε Πύλος ὁ Κλήσωνος, ἀγαγὼν ἐκ τῆς Μεγαρίδος τοὺς ἔχοντας τότε αὐτὴν Λέλεγας. καὶ τῆς μὲν οὐκ ὤνατο, ὑπὸ Νηλέως καὶ τῶν ἐξ Ἰωλκοῦ Πελασγῶν ἐκβληθεὶς· ἀποχωρήσας δὲ ἐς τὴν ὁμορον ἔσχεν ἐνταῦθα Πύλον τὴν ἐν τῇ Ἠλείᾳ.

From Mothone it is a journey of just one hundred stades to Cape Koryphasion; and on the cape lies Pylos [*sc.* of Messenia]. Pylos was founded by Pylos, son of Kleson: he brought from Megaris the Leleges, who at that time occupied it. But he did not enjoy the city which he had founded, being driven out by Neleus and the Pelasgians of Iolkos. So he withdrew to the neighboring country and there occupied Pylos in Elis. (Frazer's translation)

This account of the mythical founding of Pylos in Elis is alluded to again in VIII, where the founder is called Pylon. Elsewhere Pausanias calls the same king Pylas (i.5.3; i.39.6).

VI. Pausanias, v.3.1.

Ἡρακλῆς δὲ εἶλεν ὕστερον καὶ ἐπόρθησεν Ἥλιν, στρατιὰν παρά τε Ἀργείων καὶ ἐκ Θηβῶν ἀθροίσας καὶ Ἀρκάδας. ἤμυναν δὲ καὶ Ἠλείοις οἱ ἐκ Πύλου τοῦ ἐν τῇ Ἠλείᾳ καὶ οἱ Πισαῖοι. καὶ τοὺς μὲν ἐτιμωρήσατο αὐτῶν ὁ Ἡρακλῆς.

. . . Herakles afterward [*sc.* after his murder of the sons of Aktor during his war with Augeias, king of Elis] took and sacked Elis with an army which he had drawn together from Argos, Thebes, and Arcadia. The Eleans were assisted by the men of Pylos in Elis and by the men of Pisa. Herakles took vengeance on the people of Pylos. . . . (Frazer's translation)

¹ The translation here reads "that leads to Lasion" in accordance with Müller's emendation.

Pausanias' reference to Elean Pylos in this instance probably results from a confusion between Herakles' war with Augeias and that with Homeric Pylos; cf. the following passage and further discussion in Appendix 2.

VII. Pausanias, vi.25.3.

ἀνθρώπων δὲ ὧν ἴσμεν μόνοι τιμῶσιν Ἀιδην Ἡλείοι κατὰ αἰτίαν τήνδε. Ἡρακλεῖ στρατιὰν ἄγοντι ἐπὶ Πύλον τήν ἐν τῇ Ἥλιδι παρῆναι οἱ καὶ Ἀθηναίων συνεργὸν λέγουσιν· ἀφικέσθαι οὖν καὶ Πυλίοις τὸν Ἀιδην συμμαχήσουσα τῇ ἀπεχθείᾳ τοῦ Ἡρακλέους, ἔχοντα ἐν τῇ Πύλῳ τιμάς. ἐπάγονται δὲ καὶ Ὀμηρον τῷ λόγῳ μάρτυρα ποιήσαντα ἐν Ἰλιάδι·

Τλῆ δ' Ἀΐδης ἐν τοῖσι πελώριος ὦκὼν δίστόν,
εὐτέ μιν ὠτὸς ἀνὴρ υἱὸς Διὸς αἰγιόχοιο
ἐν Πύλῳ ἐν νεκύεσσι βαλὼν ὀδύνῃσιν ἔδωκεν.

Εἰ δὲ κατὰ τὴν Ἀγαμέμνονος καὶ Μενελάου στρατείαν ἐπὶ Ἴλιον Ποσειδῶν τῷ Ὀμήρου λόγῳ τοῖς Ἑλλήσιν ἐπικούρος ἦν, οὐκ ἂν ἄπο τοῦ εἰκότος οὐδὲ Ἀιδην εἶη, δόξη γε τοῦ αὐτοῦ ποιητοῦ, Πυλίοις ἀμύναι.

The Eleans are the only people we know of who worship Hades, and they do so for the following reason. They say that when Herakles was leading an army against Pylos in Elis, Athena was with him to help him, and therefore Hades, who was worshipped at Pylos, came to fight for the Pylians because of the hatred he bore to Herakles. In proof of their story they quote Homer, who says in the *Iliad*:

And among the rest huge Hades put up with a wound from a swift arrow,
When the same man [*sc.* Herakles], son of aegis-holding Zeus,
Hit him with a shaft in Pylos among the dead, and delivered him to pangs.

If in the expedition of Agamemnon and Menelaos against Ilion, Poseidon, according to Homer, was an ally of the Greeks, it cannot seem unnatural that in the opinion of the same poet Hades should have stood by the Pylians. (Frazer's translation)

The passage quoted from the *Iliad* is Book V, 395–397. Aristarchos, unlike Pausanias, evidently took πύλος here to be a synonym of πύλη, “gate” (Liddell, Scott, and Jones, 1940, *s.v.* πύλος); for further discussion of this point see Meyer, 1959, cols. 2135–2136.

VIII. Pausanias, vi.22.5.

Πύλον δὲ τῆς ἐν τῇ Ἠλείᾳ δῆλα τὰ ἐρείπια κατὰ τὴν ἐξ Ὀλυμπίας ἐστὶν ἐς Ἡλιν ὁρεινὴν ὁδὸν ὀγδοήκοντα δὲ στάδια ἐς Ἡλιν ἀπὸ τῆς Πύλου. ταύτην τὴν Πύλον ᾧκισε μὲν κατὰ τὰ ἤδη λελεγμένα μοι Μεγαρεὺς ἀνὴρ Πύλων ὁ Κλήσωνος· γενομένη δὲ ὑπὸ Ἡρακλέους ἀνάστατος, καὶ αὖθις ἐπισυννοικισθεῖσα ὑπὸ Ἠλείων, ἔμελλεν ἀνὰ χρόνον οὐχ ἔξειν οἰκήτορας. Παρὰ δὲ αὐτὴν ποταμὸς Λάδων κάτεισιν ἐς τὸν Πηνειόν. λέγουσι δὲ οἱ Ἠλείοι καὶ ἔπος ἐς τὴν Πύλον ταύτην ἔχειν τῶν Ὀμήρου·

γένος δ' ἦν ἐκ ποταμοῖο
Ἀλφειοῦ, ὅστ' εὐρὺν ῥέει Πυλίων διὰ γαίης.

καὶ ἐμὲ ἔπειθον λέγοντες· ῥεῖ γὰρ δὴ διὰ τῆς χώρας ταύτης ὁ Ἀλφειός, ἐς δὲ ἄλλην Πύλον οὐκ ἔστιν ἐπενεγκεῖν τὸ ἔπος.

The ruins of Pylos in Elis may be seen on the hill road which leads from Olympia to Elis: they are eighty stades from Elis. This Pylos was founded, as I have said before, by a Megarian, Pylon, son of Kleson. After being destroyed by Herakles, it was rebuilt by the Eleans, but was destined in the

course of time to be deserted. Beside it the river Ladon falls into the Peneios. The Eleans say that a verse of Homer refers to this Pylos:

And he was sprung from the river Alpheios, that flows with broad
current through the land of the Pylians.

This argument convinced me, for the Alpheios does flow through this district, and it is not possible to refer the verse to another Pylos. (Frazer's translation)

For the reference to Herakles cf. the two preceding passages. The Homeric lines quoted (*Iliad* v.544–545) refer to Diokles of Phere (a town known only in Homer, probably situated in Messenia). Pausanias does not mean to imply that he believed Elean Pylos in general to be Nestor's Pylos, since in Book IV, 36 he accepts Messenian Pylos without question as that of Nestor. His remarks here may reflect an ancient view that Homer himself refers to more than one Pylos, or they may simply reflect his own confusion. For the reference to Pylon cf. Appendix 1, V.

APPENDIX 2: IDENTIFICATION OF THE SITE

Although the excavation produced no direct evidence for the identification of Armatova and its environs, the passages cited in Appendix 1 leave very little doubt that the site is to be identified with Elean Pylos. The main arguments in support of this identification may here be briefly enumerated.

Pausanias tells us (Appendix 1, VIII) that Pylos was situated on the mountain road from Elis to Olympia at a distance of 80 stades (roughly 14.6 km.)¹ from Elis. The northern part of the mountain road is generally agreed to have followed the course of the Peneios River and the lower part of the Ladon River fairly closely and to have continued south where the Ladon bends toward the east to follow the valley of the Enipeus (Partsch, 1897, Mappe B1. 1). Diodorus (Appendix 1, I) gives the distance from Elis to Pylos as 70 stades (roughly 12.8 km.). The actual distance as the crow flies between Armatova and Elis, as measured on Partsch's map (i.e. to the outermost edge of the ruins of Elis) is 12 km.; the distance by road would presumably be a little greater (Meyer, 1959, col. 2133 gives a figure of "etwas 13 km"). Thus the site of Armatova is in close agreement with the topographical indications in Pausanias and Diodorus.²

From Strabo's account (Appendix 1, IV) we gather that Pylos was located in Hollow Elis (*κοίλη Ἠλῆς*) near Skollion, and this seems valid evidence for the identification of our site (despite the discrepancies in Strabo's account discussed below). Skollion is almost certainly to be equated in some way with Skollis, which, as Strabo later makes clear, was a rocky mountain at the junction of the territory of the Dymaiaans, the Tritaiaans, and the Eleans. Skollion and Skollis have almost universally been identified with the steep and rocky ridge near the village of Sandameri (itself called Sandameri or the Sandameriotiko), the nearest point of which is some six kilometers northeast of Armatova (Map 1).³ This ridge, which is visible for many miles, is by far the most prominent

¹ Assuming a stadion of roughly 600 English feet. Meyer (1959) gives measurements on the basis of a stadium of roughly 582 English feet. See Map 1 for geographical features mentioned in the appendix.

² A passage in Pliny which has often been taken to refer to the distance from Pylos to Elis should rather be understood as referring to the distance from Phea to Olympia; see Meyer, 1959, col. 2133.

³ E.g., Leake, 1846, p. 220; Curtius, 1852, pp. 38–39; Bursian, 1868–1872, p. 307; Bölte, 1937; Jones, 1954, p. 31, note 5; Philippson, 1959, p. 324; Meyer, 1959, col. 2133. Meyer apparently regards Strabo's reference to Skollion as a quotation from Apollodoros; however, although Apollodoros is mentioned in the passage immediately preceding (in which Strabo takes Apollodoros to task for failing to understand Homer's references to Ephyra and Oichalia), he does not in any way attribute his information about Elean Pylos to Apollodoros.

There is a slight problem here, and it is therefore worthwhile to review the evidence briefly.

Skollion and Skollis are mentioned only in Strabo, Skollion only in the passage pertaining to Elean Pylos (Appendix 1, IV). Although Strabo tells us nothing precise about the location of Skollion except that Elean Pylos was near it, he gives in two passages considerably more information about Skollis, and these are worth quoting here:

πέτρην δ' Ὀλενίην εἰκάζουσι τὴν νῦν Σκόλλιν· ἀνάγκη γὰρ εἰκότα λέγειν, καὶ τῶν τόπων καὶ τῶν ὀνομάτων μεταβεβλημένων, ἐκείνου τε μὴ σφόδρα ἐπὶ πολλῶν σαφηνίζοντος· ἔστι δ' ὄρος πετρῶδες κοινὸν Δυμαίων τε καὶ Τριταίων καὶ Ἠλείων, ἐχόμενον ἑτέρου τινὸς Ἀρκαδικοῦ ὄρους Λαμπείας, δὲ τῆς Ἠλίδος μὲν διέστηκεν ἑκατὸν καὶ τριάκοντα σταδίων, Τριταίας δὲ ἑκατὸν, καὶ Δύμης τοὺς ἴσους, Ἀχαϊκῶν πόλεων. (VIII.3.10)

(The Olenian Rock is surmised to be what is now called Skollis; for we are obliged to state what is merely probable, because both the places and the names have undergone changes, and because in many cases the poet [*sc.* Homer] does not make himself very clear. Skollis is a rocky mountain

landmark in the vicinity of Armatova (Pls. 1:a, 2:d, 3:b), and it is natural to describe the site as lying near it.

Pausanias also tells us that Pylos lay at or near the confluence of the Peneios and Ladon Rivers. Although this is the only ancient reference to the Ladon of Elis (in contrast to the better known Ladon of Arkadia, a tributary of the Alpheios), and Pausanias does not give us any further clues about its location, it is reasonable to identify the Ladon with the most important of the tributaries of

common to the territories of the Dymaiaans, the Tritaiaans, and the Eleans, and borders on another Arcadian mountain called Lampeia, which is one hundred and thirty stadia distant from Elis, one hundred from Tritaia, and the same from Dyme; the last two are Achaian cities.)

ἐφεξῆς δ' ἐστὶν ἡ Δύμη, πόλις ἀλίμενος, πασῶν δυσμικωτάτῃ, ἀφ' οὗ καὶ τοῦνομα πρότερον δ' ἐκαλεῖτο Στράτος· διαιρεῖ δ' αὐτὴν ἀπὸ τῆς Ἡλείας κατὰ Βουπράσιον ὁ Λάρισος ποταμός, ῥέων ἐξ ὄρους· τοῦτο δ' οἱ μὲν Σκόλλιν καλοῦσιν, Ὅμηρος δὲ πέτρην Ὠλενίην. (VIII.7.5)

(Next [*sc.* of the cities of Achaia] comes Dyme, a city without a harbour, the farthest of all towards the west, a fact from which it takes its name. But in earlier times it was called Stratos. The boundary between it and the Elean country, Bouprasion, is formed by the Larisos river, which flows from a mountain. Some writers call this mountain Skollis, but Homer calls it the Olenian Rock.)

From the point of view of locating Skollis, the two most important facts in these passages are that Skollis borders on the Arcadian mountain Lampeia (for which Strabo gives distances from Elis, Tritaia, and Dyme) and that from it flows the Larisos River, which forms the boundary between the Achaean city of Dyme and the Elean region of Bouprasion.

One cannot triangulate Lampeia on a modern map from the distances given by Strabo because the radii from Elis, Tritaia, and Dyme fail to meet one another (i.e. he has evidently underestimated the size of this part of the Peloponnese). If, however, the distances are increased by a factor of *ca.* 1.2, they meet at a point roughly 18 km. northeast of Armatova among the westernmost peaks of the Erymanthos range. Scholars have sometimes identified Lampeia with the peak now called Kalliphoni (e.g., Frazer, 1898, p. 283; Geiger, 1925a). In any case, it is clear that Lampeia was a mountain peak in northwestern Arkadia, near the border with Elis.

Since Skollis is said to border on Lampeia and to be the source of a river which formed the border between Achaia and Elis, it must lie to the west and north of Lampeia. The Larisos River must have flowed into the sea not far south of the Araxos promontory, and it may perhaps be identified with the stream now called Mana or Stimana (Geiger, 1925b). Regardless of its precise identification, none of the various watercourses which flow into the sea north of the Peneios and south of Araxos arises far inland, and the distances between the sources of these watercourses and the mountains of western Arkadia is many kilometers.

One way to reconcile the various indications in Strabo so far discussed (assuming that he himself had a clear picture in his mind) is to regard Skollis as the range of hills (including the Sandameri ridge) which extends from northwestern Arkadia towards Araxos (Pl. 1:a); these hills serve both as a watershed and as a natural boundary between western Achaia and northern Elis (Geyer, 1929; see maps VIII and IX in Jones, 1927).

A difficulty here, however, is that Strabo's tentative identification in the passages mentioned of Skollis with the Olenian Rock of Homer suggests that he had in mind a rather different picture of Skollis. Whatever the true identification of the Olenian Rock (modern scholars tend to place it at Olene in the valley of the Lestenitsa, a tributary of the Alpheios; see Map 1 and Bölte, 1937), he clearly thought of it for purposes of this identification as a prominent landmark rather than a range of hills. The Sandameri ridge is by far the most prominent of these hills, and may be seen from great distances, even from the coast. Hence it is reasonable to suppose that Skollis could refer both to the range of hills and to the most prominent feature within it.

What about the relationship between Skollion and Skollis? Geyer (1929) suggests two possibilities. One, which he prefers, is that Skollion represents an arbitrary manuscript variation of no significance ("überhaupt die Änderung des handschriftlichen τὸν Σκόλλιν in τὸ Σκόλλιον willkürlich erscheint"). The other is that the diminutive form was used to refer specifically to the Sandameri ridge. Although I prefer the latter possibility, it is hard to explain why Strabo used the form Skollis when suggesting the identification with the Olenian Rock.

the Peneios and the only one which might be said to enter it on the mountain road from Elis to Olympia (Map 1). Armatova is located immediately beside the confluence of the two rivers, which, like the Sandameriotiko, forms an obvious landmark.

Strabo's account of Elean geography is much confused (see the commentary on Appendix 1, IV). The confusion seems pretty certainly due to the often conflicting information which he found in his sources and which he does not attempt to reconcile (see Meyer, 1937; 1959, no. 3). Strabo's sources were primarily concerned with finding suitable candidates in Elis for Homer's Pylos. One source or group of sources evidently therefore argued that Elean Pylos (and the other Homeric sites Ephyra and Oinoe) were situated on the coast (Meyer, 1959, no. 3), presumably because of the many indications in the Homeric poems that Pylos was at or very near the coast. A coastal Pylos in Elis seems almost certainly a fabrication of the Homeric commentators whom Strabo used as sources. Other sources pretty clearly had the site of Armatova in mind, to judge from the reference to Skollion. The most plausible explanation for their view is that Armatova actually was or had been called Pylos, so that they were compelled to identify it as such despite the features which made it inconvenient as a candidate for Homeric Pylos such as its distance from the sea. They would then have had either to reject the identification of Elean Pylos with the Pylos of the Homeric poems (as does Strabo) or to make extraordinary efforts to explain the discrepancies between Elean Pylos and the geographical indications of the Homeric poems.

Except for Diodorus' mention of the distance to Elis, discussed above, the references in Diodorus and Xenophon give no precise information about the location of Pylos. Nevertheless, they help to support the identification in a general way. The invasion of Elis by King Pausanias described by Diodorus (Appendix 1, I) probably followed a fairly direct route northwestward from Lasion, at the eastern edge of the Elean highland, to the city of Elis on the lowlands of Hollow Elis. Pylos is mentioned just before Elis, as is appropriate for a town located at the eastern edge of the lowlands. In Xenophon's account of the later war (Appendix 1, II and III) Pylos is called *χωρίον καλόν* in a context which implies that it was a stronghold. The natural defenses of Armatova are obvious. Finally, the site has given clear evidence that it was occupied at the time when these events took place.

Although it seems safe to discount the shadowy Pylos on the coast of Elis as the imaginary product of ancient Homeric scholarship, another candidate for Elean Pylos is worthy of mention. In the 19th century, a few scholars made an attempt to identify Pylos with Kulogli (indicated as Oinoe on Map 1; for the ancient remains there see Frazer, 1898, p. 98 and Sperling, 1942, p. 83, no. 2). Chief among them was Leake (1830, pp. 226–229; 1846, pp. 219–220), who noted that the direct distance between Elis and Kulogli was compatible with the figures given by Diodorus and Pausanias. Kulogli, he argued, was therefore to be preferred to our site because it was in a more direct line between Elis and Olympia, whereas our site “could not have been in any ordinary track” from the one center to the other (1846, p. 219). He also suggested in support of his view that Pausanias' words *παρὰ αὐτὴν ποταμὸς Λάδων κάτεισι ἐς τὸν Πηνειόν* mean only “that the Ladon flowed by Pylus to the Peneios” (1830, p. 229) and that “they do not exactly indicate at what distance below Pylus that river joined the Peneios” (1846, p. 219). Leake was correct about the direct distance between Elis and Kulogli, which is about 14.5 km. as the crow flies. The other points, however, are implausible: *ὁδός* implies a road for wheeled traffic for which the river valleys and even the riverbeds themselves, which are for the most part broad and flat, would have been ideal (it is perhaps worth noting here that Leake apparently never traveled this route himself or visited Agrapidochori); *παρὰ* with the accusative most often means “beside, near by”, whereas the confluence of the Ladon and the

Peneios is roughly eight kilometers from Kulogli as the crow flies. Thus the argument for Kulogli is unconvincing. A better case, in fact, can be made for identifying Kulogli with the Ephyra-Oinoe of Strabo's account (see commentary on Appendix 1, IV).

It is appropriate to note here that the name Pylos is etymologically related to many other Greek words which have the basic meaning of "gateway" or "pass" such as *πύλη*, *πυλῶν*, *πύλωμα*, and the common place name *Πύλαι* (with compounds like *Θερμόπυλαι*). The existence of at least three places called Pylos (if Strabo and the proverb he quotes in Appendix 1, IV are correct) suggests that Pylos, like Pylai, was applied to places with appropriate natural characteristics. Armatova, which can be viewed as a gateway between Hollow Elis and the highlands to the east and southeast, has just such natural characteristics (Chapter I, above).⁴

A final question perhaps worth brief consideration is whether our site played any independent role in mythology or whether, as Meyer suggests (1959, col. 2134) about the passage from Pausanias given in Appendix 1, VIII, the occasional references to Pylos in Elis in a mythological context are all due to confusion with Messenian Pylos (i.e. the true "Homeric" Pylos). The archaeological evidence shows that conditions conducive to such confusion existed from very early times. We have seen that our site was occupied in the Iron Age from at least as early as the Late Geometric period, and it was presumably then already called Pylos. Messenian Pylos was abandoned at the end of the Bronze Age, and it is conceivable that its location was already half-forgotten in the Early Iron Age. Since it was in all probability during the Early Iron Age that the Homeric poems were taking their final form, it is even possible that the existence of one or more other places called Pylos, coupled with the fact that the location of Bronze Age Pylos was fading from memory, contributed to the geographical imprecision evident in the Homeric poems themselves (and which has caused so many difficulties for Homeric commentators and scholars ever since). Be that as it may, it is clear that there would have been ever increasing opportunities for mythological events to be transferred from one Pylos to another as the Iron Age advanced.⁵

There is certainly no compelling reason to associate the original version of any particular mythological event with Pylos in Elis. The mythical founder variously called Pylos, Pylon, and Pylas by Pausanias (Appendix 1, V, with references there cited, and VIII) was clearly invented to explain the name of the site and should be regarded as aetiological rather than mythological. Pausanias twice mentions Elean Pylos as participating in a war or wars against Herakles (Appendix 1, VI and VII) and once as having been destroyed by Herakles (Appendix 1, VIII). In the passages referring to a war or wars, he seems to confuse and conflate several different traditions. Herakles was believed from early times to have carried out two wars in the Western Peloponnese, one against Pylos (e.g., *Iliad* xi.690–693; Apollodoros, ii.7.3) and the other against Augeias, king of Elis (e.g., Apollodoros, ii.7.2). He is also reported to have been involved in a struggle with Hades, although the exact circumstances are obscure.⁶ The passage from Pausanias given in Appendix 1, VI is concerned

⁴ One might mention here the existence of a town called Portes on the southern slope of the Sandameri ridge (Map 1), which, as Themelis points out (1965, p. 218, note 9), provides a modern equivalent for the ancient name Pylos. There is probably no direct connection, and the similarity may well be due to the fact that people continue to respond to geographical conditions in similar ways.

⁵ Meyer (1959, nos. 3 and 4) supposes that Homeric associations were first posited in antiquity for an imaginary coastal Pylos in Elis which figures in Strabo's account (see above), and that these then became attached to our site. Surely, however, confusion between our site and Homeric Pylos could have come about by a more direct process; Pausanias' confusion, for instance, does not require any such intermediate step.

⁶ Roscher, 1886–1890, cols. 1781, 1782, 1788. It is possible that the struggle with Hades was originally separate from the war against Pylos, if we discount the theory espoused by Meyer (1959, col. 2136, with

with the war against Augeias, and the reference to Elean Pylos, although at first sight geographically appropriate, may be due to a conflation of this war with that against “Homeric” (i.e. Messenian) Pylos.⁷ The passage given in Appendix 1, VII also seems to confuse the war against Augeias with that against “Homeric” Pylos, with the added complication that Herakles’ struggle with Hades is also included.⁸ The passage quoted in Appendix 1, VIII does nothing to clear up the confusion, since it does not make clear whether Pausanias has in mind the war against Pylos or that against Augeias. In any case, although we cannot rule out every possibility, the chances that Elean Pylos was an original participant in any mythological event are slight.

references) that Neleus was a doublet for Hades. The only passage that appears to make a direct connection between Hades and Pylos, other than Pausanias’ own confused account in Appendix 1, VII, is the one which he there quotes from the *Iliad* (i.e. v.395–397). The interpretation of the *Iliad* passage is not entirely clear, however, and that the reference to Pylos was considered problematic in antiquity is suggested by the interpretation of Aristarchos (see commentary on Appendix 1, VII).

⁷ Pylos is not mentioned as an ally of Augeias by any other source.

⁸ Pausanias seems here to be describing Herakles’ war against Pylos, which elsewhere he clearly associates with Messenian Pylos (see II.18.6 and III.26.6), rather than the war with Augeias. In the passages in the *Iliad* and Apollodoros on the war against Pylos noted above, the Pylos in question is also clearly “Homeric” (i.e. Messenian) Pylos, since all the sons of Neleus except Nestor are said to have been killed during the war. The placing of this war in Elis in the Pausanias passage probably arose from Pausanias’ equation of Herakles’ war against Pylos with his struggle against Hades, and the authentic connection of Hades with Elis.

It is perhaps worth noting the possibility that the association of Hades with Elis, and perhaps also with Messenian Pylos, may have come about because of the prior existence of places called Pylos; i.e. a place called “gateway” because of its physical characteristics may later have become known as a gateway to the underworld.

CONCORDANCE OF “AO” NUMBERS

Inv. No. Cat. No.

AO.2 **A55**
 AO.3 **A54**
 AO.4 **A53**
 AO.5 **A51**
 AO.7 **A59**
 AO.8 **A62**
 AO.10 **D58**
 AO.11 **D50**
 AO.14 **D24**
 AO.15 **A48**
 AO.16 **A49**
 AO.22 **A63**
 AO.23 **D93**
 AO.24 **D49**
 AO.25 **D18**
 AO.28 **A60**
 AO.29 **A58**
 AO.30 **D4**
 AO.31 **A47**
 AO.35 **D99**
 AO.37 **D136**
 AO.41 **D26**
 AO.42 **A56**
 AO.44 **D31**
 AO.45 **E24**
 AO.46 **E4**
 AO.47 **A61**
 AO.51 **D81**
 AO.59 **C198**
 AO.74 **C202**
 AO.78 **D36**
 AO.84 **D76**
 AO.85 **E8**
 AO.90 **E2**
 AO.92 **E3**
 AO.94 **E1**
 AO.97 **E9**
 AO.98 **D80**
 AO.102 **D104**
 AO.103 **D98**
 AO.105 **C193**
 AO.108 **D45**
 AO.125 **E5**

Inv. No. Cat. No.

AO.126 **D9**
 AO.127 **E6**
 AO.128 **D67**
 AO.129 **E7**
 AO.130 **C206**
 AO.132 **C196**
 AO.135 **D117**
 AO.146 **D135**
 AO.150 **C197**
 AO.152 **C199**
 AO.178 **D138**
 AO.184 **D129**
 AO.187 **D116**
 AO.190 **D133**
 AO.192 **C201**
 AO.194 **D118**
 AO.197 **D103**
 AO.198 **D100**
 AO.199 **D102**
 AO.202 **D14**
 AO.203 **F12**
 AO.204 **D69**
 AO.208 **F13**
 AO.209 **E53**
 AO.210 **D57**
 AO.211 **D29**
 AO.212 **E49**
 AO.213 **E50**
 AO.216 **E18**
 AO.217 **F16**
 AO.218 **D16**
 AO.221 **C200**
 AO.226 **C205**
 AO.229 **D170**
 AO.231 **D96**
 AO.233 **C210**
 AO.243 **C203**
 AO.244 **E55**
 AO.245 **E56**
 AO.246 **F19**
 AO.247 **F20**
 AO.248 **E48**
 AO.249 **C194**

Inv. No. Cat. No.

AO.250 **C195**
 AO.251 **D33**
 AO.252 **A50**
 AO.256 **F14**
 AO.257 **D61**
 AO.258 **C212**
 AO.268 **D52**
 AO.269 **D44**
 AO.270 **F8**
 AO.271 **F9**
 AO.273 **D70**
 AO.277 **F10**
 AO.278 **F11**
 AO.280 **F15A**
 AO.282 **A52**
 AO.283 **F17**
 AO.284 **F18**
 AO.286 **D72**
 AO.288 **E52**
 AO.289 **E51**
 AO.290 **D20**
 AO.291 **D75**
 AO.292 **D77**
 AO.294 **D128**
 AO.297 **E16**
 AO.298 **D42**
 AO.299 **D62**
 AO.300 **D64**
 AO.301 **D38**
 AO.302 **D22**
 AO.303 **D35**
 AO.304 **D43**
 AO.305 **D37**
 AO.306 **D25**
 AO.312 **E23**
 AO.313 **D97**
 AO.315 **D92**
 AO.316 **D114**
 AO.322 **D105**
 AO.323 **D8**
 AO.324 **D34**
 AO.327 **E21**
 AO.328 **E17**

AO.329	E19	AO.415	D132	AO.481	D1
AO.330	E16	AO.416	D120	AO.482	F3
AO.332	D131	AO.418	F1	AO.484	D6
AO.333	D134	AO.419	E12	AO.485	D79
AO.334	D126	AO.420	E14	AO.486	D2
AO.335	D122	AO.421	E11	AO.487	D142
AO.341	D109	AO.422	F2	AO.493	D56
AO.346	D108	AO.423	E13	AO.494	D19
AO.350	F30	AO.424	D5	AO.495	E25
AO.352	D68	AO.425	E47	AO.496	F21
AO.353	E22	AO.426	E44	AO.497	D166
AO.355	E15	AO.427	E45	AO.498	D167
AO.356	D10	AO.428	E46	AO.499	F15B
AO.357	D11	AO.429	D13	AO.501	D153
AO.361	D32	AO.430	D12	AO.502	D154
AO.366	D47	AO.432	D127	AO.503	D27
AO.367	D7	AO.433	D40	AO.504	D30
AO.370	D54	AO.434	D17	AO.505	F4
AO.371	D59	AO.435	F5	AO.506	D3
AO.372	D39	AO.438	D125	AO.508	D156
AO.377	D139	AO.439	F6	AO.509	E54
AO.378	D94	AO.440	F7	AO.511	D85
AO.382	E20	AO.441	D168	AO.513	D84
AO.383	D82	AO.442	D111	AO.514	D87
AO.384	D41	AO.446	C207	AO.517	D78
AO.386	D119	AO.447	C209	AO.518	D171
AO.390	D60	AO.448	D88	AO.522	D169
AO.391	D48	AO.453	C204	AO.523	D83
AO.392	A57	AO.455	D21	AO.530	D46
AO.393	D71	AO.456	C211	AO.531	D74
AO.394	D91	AO.459	D141	AO.532	D113
AO.395	D95	AO.460	D107	AO.535	D106
AO.396	D65	AO.463	C208	AO.536	D137
AO.397	D55	AO.465	D66	AO.537	D63
AO.398	D53	AO.470	D90	AO.538	D73
AO.399	D124	AO.471	D123	AO.540	D86
AO.400	D101	AO.472	D115	AO.541	D28
AO.403	D130	AO.475	D112	AO.543	D89
AO.411	D121	AO.477	D110	AO.544	D15
AO.412	D23	AO.478	D140	AO.546	D157
AO.414	D51	AO.480	E43	AO.547	D158

CONCORDANCE OF "AP" NUMBERS

Inv. No. Cat. No.

AP.1 **E27**
 AP.2 **E33**
 AP.3 **E26**
 AP.4 **E36**
 AP.5 **D221**
 AP.7 **D261**
 AP.8 **D237**
 AP.10 **D173**
 AP.11 **D176**
 AP.14 **E37**
 AP.15 **E34**
 AP.17 **D175**
 AP.18 **A9**
 AP.19 **E31**
 AP.20 **D260**
 AP.21 **D216**
 AP.22 **D212**
 AP.23 **E29**
 AP.24 **E35**
 AP.25 **E40**
 AP.26 **E38**
 AP.27 **F40**
 AP.28 **E28**
 AP.29 **E32**
 AP.30 **E42**
 AP.31 **E41**
 AP.32 **D247**
 AP.33 **E39**
 AP.34 **D263**
 AP.35 **D262**
 AP.36 **D230**
 AP.37 **D185**
 AP.38 **C51**
 AP.39 **C104**
 AP.40 **C128**
 AP.41 **C74**
 AP.42 **D314**
 AP.43 **D172**
 AP.44 **C110**
 AP.45 **C67**

Inv. No. Cat. No.

AP.46 **C69**
 AP.47 **D268**
 AP.48 **D219**
 AP.49 **C27**
 AP.50 **D304**
 AP.51 **D178**
 AP.52 **D267**
 AP.54 **A2**
 AP.55 **E30**
 AP.56 **D200**
 AP.57 **D179**
 AP.58 **D187**
 AP.59 **D190**
 AP.60 **D238**
 AP.61 **C55**
 AP.62 **C1**
 AP.63 **C59**
 AP.64 **C184**
 AP.65 **C30**
 AP.66 **C80**
 AP.67 **C66**
 AP.69 **C133**
 AP.70 **C47**
 AP.71 **D174**
 AP.72 **D186**
 AP.73 **D188**
 AP.74 **C26**
 AP.75 **D305**
 AP.76 **D306**
 AP.77 **D189**
 AP.78 **C8**
 AP.79 **C114**
 AP.80 **C116**
 AP.81 **C102**
 AP.82 **C84**
 AP.83 **C7**
 AP.84 **C2**
 AP.85 **C117**
 AP.86 **C3**
 AP.87 **B26**

Inv. No. Cat. No.

AP.88 **B28**
 AP.89 **B25**
 AP.90 **F41**
 AP.91 **D215**
 AP.92 **C73**
 AP.93 **C54**
 AP.94 **B23**
 AP.95 **D184**
 AP.96 **D220**
 AP.97 **D218**
 AP.98 **D177**
 AP.99 **B24**
 AP.100 **B21**
 AP.101 **D217**
 AP.102 **B56**
 AP.103 **B53**
 AP.104 **F42**
 AP.105 **B22**
 AP.106 **F39**
 AP.107 **B54**
 AP.108 **C136**
 AP.109 **C60**
 AP.110 **C75**
 AP.111 **C134**
 AP.112 **C111**
 AP.113 **C4**
 AP.114 **C65**
 AP.115 **C64**
 AP.116 **C139**
 AP.117 **C61**
 AP.118 **C15**
 AP.119 **C108**
 AP.120 **C138**
 AP.121 **C140**
 AP.122 **C103**
 AP.123 **C129**
 AP.124 **C29**
 AP.125 **C52**
 AP.126 **C72**
 AP.127 **C79**

Inv. No. Cat. No.

AP.128 **C76**
 AP.129 **C71**
 AP.130 **C78**
 AP.131 **C68**
 AP.132 **C70**
 AP.133 **C28**
 AP.134 **C112**
 AP.135 **C90**

Inv. No. Cat. No.

AP.136 **D298**
 AP.137 **D214**
 AP.138 **C113**
 AP.139 **D199**
 AP.140 **C115**
 AP.141 **C109**
 AP.142 **C127**

Inv. No. Cat. No.

AP.143 **C146**
 AP.144 **C132**
 AP.145 **C81**
 AP.146 **C77**
 AP.147 **C56**
 AP.148 **C126**
 AP.149 **C106**

CONCORDANCE OF “Π” NUMBERS (THEMELIS)

Inv. No. Cat. No.

Π 833 **B33**
 Π 834 **B29**
 Π 836 **B50**
 Π 837 **B38**
 Π 840 **B27**
 Π 845 **B1**
 Π 846 **B2**
 Π 847 **B13**

Inv. No. Cat. No.

Π 848 **B14**
 Π 849 **B12**
 Π 850 **B57**
 Π 867 **B77**
 Π 870 **B44**
 Π 871 **B37**
 Π 872 **B49**
 Π 873 **B4**

INDEX

- ACHAIA** 5, 8, 162³¹, pottery 24, 32, **B23**, **B24**, **B31** *See also* Coins
Agis, King of Sparta 155
Agrapidochori 1, 4, 5, 9, 92, 157, 163
Akroreia 7, 8, 155
Alpheios River 7, 155, 156, 162, 162³¹
Altis at Olympia, Arcadian occupation **D2**
Amber(?), bead **D75**
Apollodoros 161³, 164
Araxos 162³¹
Archaic period 68, Part C *passim*; strays in Classical deposits 63
See also Wells
Argos: cups 28; kantharoi 26; “skyphoi” **B33**, **B34**; spoollike weights 102
Aristarchos 159, 165⁶¹
Aristophanes 157
Arkadia 7, 162, 162³¹; pottery 12
See also Coins, Arcadian League
Armatova 1–6, 8, 9, 11, 12², 16, 34, 64, 66–69, 82, 86, 88–89, 91, 92, 98, 100, 117, 124, 136, 139, 151–153, 161–164
Athens: Agora, chytrai 114, lamps 98, 125, lekythoi 113, “saltcellars” 107
Pnyx, terracotta figurines **D80**
See also Coins, Athenian New Style; Pottery styles, “Dipylon style”
Attica: houses 67; pottery, Geometric 32, 33, hydriks **B1**; Roman, jugs 135
See also Athens
Augeias, King of Elis 159, 164–165
Austrian Archaeological Institute, trial trenches 2, 4

BECHROU 7
Benton, S. 19
Bone: bead **D77**; pin, handle, or spoon **D76**; pin **E8**
Bones, animal v, 18; human v. *See also* Graves
Bouprasion 162³¹
Bronze. container fragments **D7–D14**; dipper **E15**; mirror **D15**; personal ornaments **D17–D21**, **E5–E7**, **E48–E52**; plating **F5**; seal ring **D16**; sheet, Archaic 62; unidentified **D22–D24**
Bronze Age 1, 102. *See also* Early Helladic; Late Helladic; Middle Helladic; Mycenaean settlement; Pylos; Stone

Burials. *See* Graves; Pithos burials; Tiles; Tombs; “Tymboi I and II”
Byzantine period 9, 117, 121
Byzantine, Late or Frankish period 1, 8, 68, Part F *passim*. *See also* Frankish period; Graves; Houses

CAPE KYLLENE 3. *See also* Chlemoutsi
Chlemoutsi 12; castle of Ciarenza at **F1**, 149; Gray Minyan goblets **A2**
Classical period v, 6–7, 11, 35, Part D *passim*. *See also* Houses; Pottery; Wells
Coins: Achaia, Charles I of Anjou **F1**; Achaean League 7, **D5**; Arcadian League **E43**; Aigina 6, 68, 71, **D4**; Antoninianus of Tacitus **E3**; Asyut hoard **D4**; Athenian New Style 117; Caracalla **E12**; Charon, coins for 124; Constantine, family of 117; Dyme **E47**; Elis 7, 68, **D1**, **D2**, **E2**, **E12–E14**; Hadrian **E13**, **E14**; John II, at Corinth 149; Manuel I or later **F2–F4**, at Corinth 149; Megalopolis **E43**; Orchomenos (Boiotia) 7, **D3**; Rome **E11**; Septimius Severus **E11**; Sikyon **E1**, **E44**, **E45**; Siscia **E3**, **E4**; Thebes **E46**; unidentified **D6**; Valens **E4**; William Villehardouin, at Corinth 149
Corinth: lamps 98, 125
pottery, Archaic 6; Byzantine 147, 148, 149; Corinthian **B37**, 32, 33, **C54**, 49, 50, 58, **D267**. *See also* Ithaka; Geometric **B33**, **B49**
spoollike weights 102

DELPHI, jug **B21**
Diodorus Siculus 7–8, 155, 161, 163
Diokles of Phere 160
Dyme 162³¹. *See also* Coins

EARLY HELLADIC. *See* Olympia, pottery; Wares, “Adriatic”
Elis: city 6, 7, 8, 67, 155, 156, 158, 161, 162³¹, 163
Hollow 3, 161, 163, 164
lamps 125
pottery, Archaic 18, 24, 35–36, 38, 46, and Orientalizing 64. *See also* Olympia; Classical 107; Geometric 18, **B1**, 24, 26, 28, 35
region 5, 7, 155–156, 162³¹, 163, 165⁸
tile-covered graves 123, 152

- Enipeus River 7, 161
 Epitalion 155
 Ephyra 161³, 163
 Ephyra-Oinoe 158, 164
 Erymanthos 3, 8, 155, 162³
 Eupagion 155
 Expedition Scientifique de Morée 1
- FIGURINES. *See* Terracotta
- Fisher, J. **D4**
- Frankish period 149. *See also* Byzantine, Late or Frankish period
- GAUER, W. 46, 48, **C64**, **C67**, **C72**, **C73**, 49–50, 53, **C108**, 56, 57, **C132–C134**, **C136**
 Geometric period: 5, 6, 11, 164, Part B *passim*
 Geometric descendants: pottery, cups 57, jugs 47, 65, kraters 36; decoration, motifs, “sausages” 36
 Geyer, F. 162³
 Glass **E17–E21**, **F15B–F21**
 Gourlesas River 158
 Graves: Classical 192; 293
 Roman 3 120; 4 120; 5 120–121; 6 125; 7 125; 8 126; 9 126–127; 10 127; 11 127; 12 128; 13 128–129; 14 129; 15 129; 16 129; 17 130; 18 130; 19 130; 20 130–131; 21 131; 22 131
 Byzantine or Frankish 23 139; 24 139; 25 139; 26 150; 27 150; 28 150; 29 150; 30 151
 See also Burials
 Greek Archaeological Service, trial excavation 1
 Grierson, P. 149³
- HADES 164, 165⁸
 Halieis: flaked stone in Classical contexts 16; houses 67, 71, 72; orthogonal plan 71
 Halion 155
 Hayes, J. W. 46
 Hearth: Byzantine or Frankish 143; Middle Helladic 11
 Helladic. *See* Bronze Age, Early Helladic, Middle Helladic, Late Helladic
 Hellenistic period 8, 107, 108, 117, 123, 136, 152
 Herakles *vs* Augeias 158–160, 164, 165⁸, *vs* Hades 164–165, *vs* Nemean Lion, on seal **D16**
 Hollow Elis. *See* Elis
 Homer 160, 161³. *See also* Pylos
- Houses: Classical 6, 35², 66, 67, 70, 74, 76, 79, 80, 81–89, 91–92, 100; Byzantine or Frankish 4, 5, 9, 141–144, 149, 151, 152
 See also Attica; Halieis; Makryisia; Olynthos
- INSCRIPTION, on Archaic pithos. *See* Pottery shapes, pithos
- Ionic capital, at Agrapidochori 1
- Iron: arrowheads **D37–D42**; door latches, Classical 79, **D44**, **D45**; nails, Byzantine or Frankish 142, **F6–F12**; nails and spikes **D46–D59**, and tacks **E16**, **E54**; spearhead(?) **D43**; unidentified **D60–D74**, **F13**, **F14**
- Ithaka, pottery: Classical 50; Corinthian **B37**, **B45**; Geometric 19, **B11**, 24, **B21**, **B23**, **B28**, **B31**, **B34**, **B35**, **B38**, **B48**, 32–33
- KALLIPHONI 162³
 Kendron 1
 Kirk, G. S. **B1**
 Kramer, G. 158
 “Kremilas” 4, 6, 92
 Kulogli 1, 158, 163, 164
- LADON RIVER (Arcadia) 162, (Elis) 1, 3, 4, 7, 157, 158, 161, 162, 163
- Lakonia, pottery: Archaic 6, 46, **C73**, **C102**, **C103**; “Black-glazed” **C74**; “Black-figured” **C54**, **C184**
- Lampeia, Arcadian mountain 162³
- Lamps: Classical 68, 98, **D82–D95**; Roman **E9**, 125, 132, **E22–E25**, **E55**, **E56**
 See also Athens, Agora; Corinth; Olympia
- Larisos River 162³
- Lasion, on mountain road to Arkadia 7, 8, 155, 163
- Late Helladic. *See* Tombs
- Lead: clamps for pottery **D28–D34**; sheet **C195**, **D35**; strips **C193**, **C194**; weights, Classical **D25–D27**, **E53**; unidentified, Classical(?) **D36**
- Leake, W. M. 1, 163
- Lestenitsa (Enipeus) River 7, 162³
- Loomweights: Classical 75, **D96–D104**, 102; Geometric **B78**
- MACKAY, T. S. 147², 149
- Makryisia: houses 67; spoollike weights 102
- Mana, stream 162³

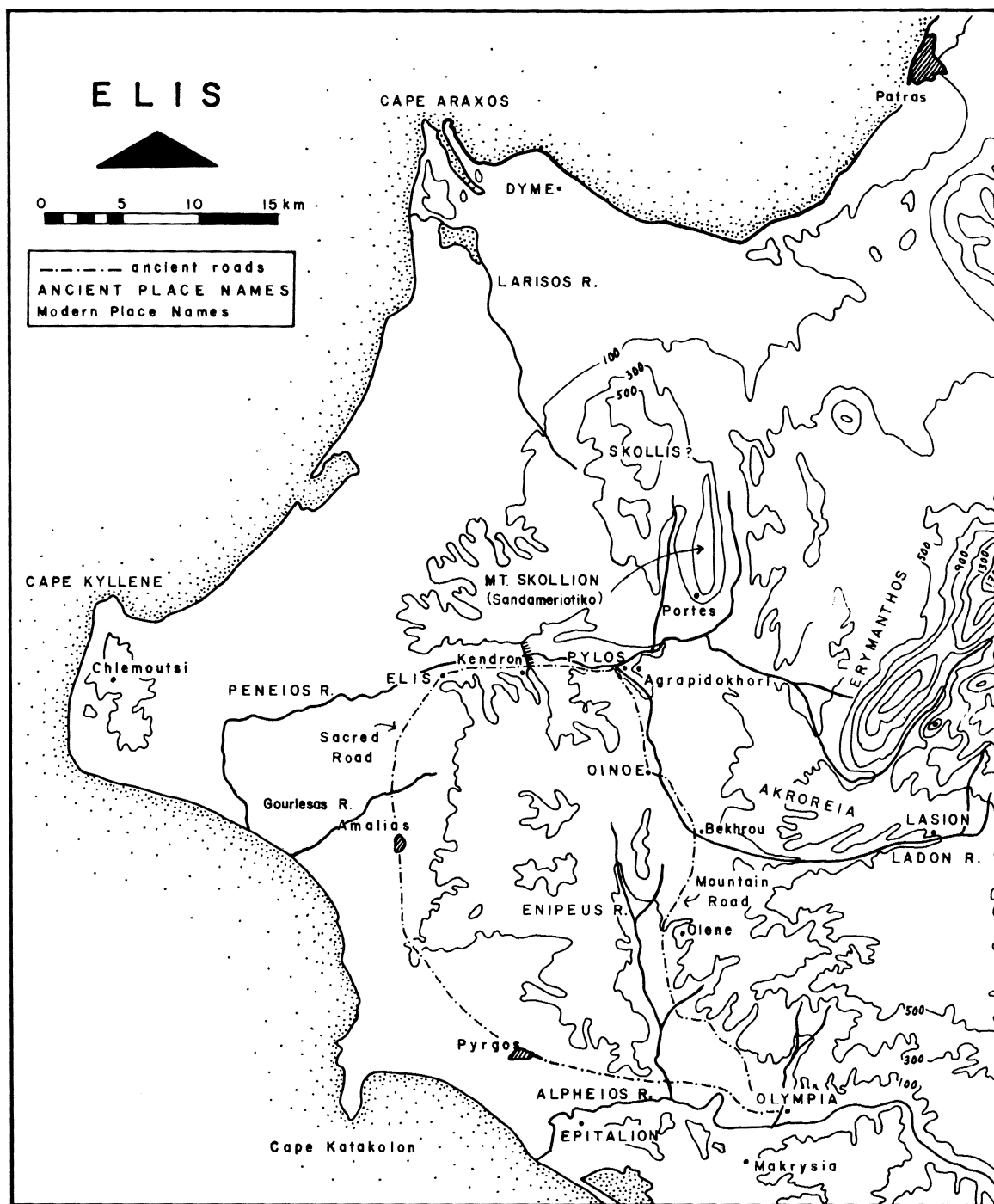
- Margana 156
 Mesolithic period. *See* Stone
 Meyer, E. 155, 157, 158, 161, 161³, 163, 164
 Middle Helladic period 5. *See also under* Pottery decoration, techniques; Hearth; Pottery shapes; Stone; Wares, "Adriatic" and Matt Painted
 Morea, Frankish conquest. *See* Frankish period
 Müller, C. 158
 Mycenaean settlement. *See* Tombs, Late Helladic chamber tomb
- NELEUS 158, 165⁽⁶⁾, ⁸
 Nemean Lion. *See* Herakles
 Nestor 157, 160, 165⁸. *See also* Pylos, Homeric
- OBJECTS. *See* Amber; Bone; Bronze; Coins; Glass; Iron; Lead; Obsidian; Stone; Terracotta
 Obsidian 11, 15, 17, **A48**, **A49**
 Oichalia 161³
 Olene 162⁽³⁾
 Olenian Rock 161³
 Oinoe 1, 163. *See also* Ephyra-Oinoe
 Olympia 7, 161. *See also* Altis;
 Elean red figure from Workshop of Pheidias 107
 lamps 98
 pottery, Archaic 6, **B35**, 34, 38, 40, **C51**, **C52**, **C53**, 48, **C64**, **C65**, **C67**, **C73**, 49, **C74**, 50, **C84**, **C90**, **C102**, **C103**, 53, **C104**, **C105**, 56, **C110**, **C126**, **C129**, 57, **C132**, **C133**, **C134**, **C136**, 58, **C146**, **C150**, **C184**, **D267**, **D268**, and Orientalizing 64, black figure **C15**, Classical **C7**, 107, 108, **D180**, **D184**, **D187**, **D190**, 109, 110, 113, Early Helladic **A2**, Geometric 24, **B44**, 32, **C1**, **C8**, Roman 135
 spoollike weights 102
 tile-covered burials 152
 wells 64. *See also under* Olympia, pottery *passim*
 Olynthos: houses 67, 71, 72; orthogonal plan 71; spoollike weights 102
 Opous 155
 Orientalizing period 19, **B33**, 34¹, 64. *See also* Pottery styles and under Elis; Olympia
 Orthogonal plan. *See* Halieis; Olynthos
- PALAEOLITHIC PERIOD. *See* Stone
 Parlama, L. 113
- Pausanias, King of Sparta 7, 8, 155, 163
 Pausanias, periegete 7, 8, 157, 158–160, 161, 162, 163, 164, 165
 Peloponnese 5, 7, 164, lamps 125, pottery 12, 53
 Peneios River 1, 3, 4, 7, 70, 91, 117, 157, 158, 160, 161, 162, 162⁽³⁾, 163, 164, valley 8, 35
 Pharai, pottery: Gray Minyan **A2**; Geometric 19, **B11–B14**, **B21**, **B23**, **B28**, **B49**
 Phea 161²
 Pholoe 157
 Pithos burials, Classical 7, 91, 92, 93, **D306**
 Pliny 161²
 Portes 164⁴
 Pottery: *See also* Achaia; Attica; Athens; Corinth; Pottery decoration; Elis; Ithaka; Olympia; Peloponnese; Pharai; Pottery shapes; Pottery styles; Wares
 Archaic 34–36, **C1–C192**, 64–65, **D267–D271**, **D314**, 122, 136. *See also* Lakonia; Tocra
 Byzantine or Frankish **F31–F48**. *See also under* Corinth; Decoration, motifs; Tiles; Wares
 Classical 106–107, **D172–D313**, 122, 136, **E57**. *See also* Graves; Pithos burials; Wells and under Pottery decoration, motifs
 Geometric 18–20, **B1–B76**, 32–33. *See also* Pottery styles, Thapsos class
 Hellenistic 117, 136
 Middle Helladic 11, 12, **A1–A46**, in Messenia 12
 Roman **E10**, 125, 134, **E26–E42**
 Pottery decoration, motifs:
 Archaic: animal **C54**, 64, horse **C54**; bird 36, **C15–C17**, **C19**, **C54**, **C161**, **C184**, 64; chevron **C10**; crescent 36, **C11**, 40, **C26**, **C27**, **C31**, **C43**, **C90**, **C146**; diagonal strokes 36; dots 36, **C2**, **C16**, **C18**, **C20**, 40, **C26–C32**, **C41**, **C45**, **C46**, **C55**, **C56**, **C95**, **C103**, **C113**, **C134**, 58, **C139**, **C146**, **C158**, **C165**, **C181**, **D269**; eyes 49, **C75**, **C78**, **C79**, **C81**, **C150**, **C151**; fish 36, **C146**, **C147**, 64, at Sparta **C146**; floral 36, **C2**, **C28**, **C41**, **C42**, **C55**, **C150**, **C152**, **C165**, **C181**, **C182**, 64, **D267**. *See also* lotus and tree; human figure **C54**, 64; interlocking loops 36, **C39**, **C40**; lotus 35, **C2**, **C4**, **C55**, **D267**; lozenge 36, 40, **C26**, **C55**; rays 36, **C8**, **C54**, **C57**, **C58**, **C84**, **C91**, **C93**, **C154**, **C155**, **C159**, **C179**, **C180**; red and white bands 35, **C2–C6**, **C8**, **C15**, **C26**, **C47**, **C48**, **C50**, **C54**, **C74**,

- C77, C80–C82, C110, C113–C116, C128, C134, C136, C161, C163, C179, C180**; rosettes **C113, C125**, stamped **D268**; “S” 36, 40, **C27, C46, C55, C90, C153, C155, C157, C170, C178**; “sausage” 36, **C174**; sigmas 36, **C9, C85, C94, C96**; spiral loops 36, **C29**; spirals, pothook 36, **C28, C30, C33, C57, C84**, running **C103**; stars 36, **C54**; tree **C163, C164**; triangles **C56, C175**; zigzags 36, **C4, C6–C8, 40, C26, C29, C34, C35, C48, C72, C84, C91, C105, C111, C118–C121, C126, C129, C157, C158, C162, C183**
- Byzantine or Frankish: chevrons **F40**; concentric loops **F44, F45**; triangles, crosshatched **F40**; zigzags **F42, F46**
- Classical: floral **D214, D238, D239, D283**. *See also* palmettes; human figure **D214, D218**; palmettes **D218, D238**, stamped **D254, D274**; spirals, pothook **D238**
- Geometric: checkerboard **B1, B37**; horizontal bands 19, **B2, B12–B14, B15A and B, B16–B19**; meander, single line **B13**, step 19, **B4**; “sausage” 19, **B1–B3**; ship 5, 19, **B1, 33**; sigmas 19, **B14, 32–33**; spirals, pothook **B49**, running 19, **B12, B45, 32–33**; triangles, crosshatched 23, **B21, B49**
- Roman: floral **E27**; ship **E27**; zigzags **E27**
- See also* Pottery styles; Wares
- Pottery decoration, techniques:
- black glazed, Archaic 43, 47
 - chattered. *See* rouletted
 - incised, Middle Helladic 12, or stamped, Classical 113, **D254, D274**
 - moldmade relief, Roman **E27**
 - painted, black figured, Archaic 6. *See also* Corinth and Lakonia; dark-on light, Archaic 6, 35, 40, 64; light-on-dark, Archaic 6, 36, 64; matt, Middle Helladic 12, Byzantine or Frankish “Protogeometric” 147, 149; red figured, Classical 107, **D214, D218, 113, D238, D239, D244, D283, E57**
 - rouletted **D254, E43**
 - sgraffito **F33–F35**
 - slipped, red **E10**
 - stamped, Archaic **D268**; Classical. *See under* incised
- See also* Pottery styles
- Pottery shapes:
- amphora, Archaic **C73**, Byzantine or Frankish 148, **F42–F48** Classical **D212, D213, D287–D295**
 - amphoriskos **E42**
 - aryballos, Archaic **C102, C103, C182, 64**, Geometric **B44, B46, B49**
 - basin, Archaic 61, 75, **D267, D268**, Classical **D298–D303**
 - basin or large bowl **B57–B67**
 - bowl, Archaic 35, 40, **C26–C46, 43, C47–C53, C55, 61, 64, D271**, Classical 6, 107–108, **D172–D183**; 108, **D184–D188**; 109, **D189, D265**, Geometric **B27**, Middle Helladic **A9**, Roman **E10, E27–E32**
 - bowl or cup, Classical **D203–D211**
 - closed shape, Archaic **C170–C184**, Geometric **B49–B52**
 - cover, Archaic **C189**, Geometric (for pithoi?), **B73–B76**. *See also* lid
 - cup, Archaic 28, 57, **C128–C135, 64, D269**, Byzantine or Frankish **F39**, Classical 109–110, **D199–D202, D277**, Geometric 28, **B33–B36**; or kantharos, Geometric **B37–B43**
 - hydria, Archaic 47, **C72**
 - hydriskos. *See* Attica
 - jar, Classical **D296, D297**; Middle Helladic **A30–A46**
 - jar, spouted, Byzantine or Frankish **F40**
 - juglet, Archaic 36, 50, **C84, C178, C179, C180, 64**, Geometric, **B45, B47**
 - jug, Archaic **B24, B26, 35, 47–48, C64–C71, 52, C85–C101, 64, 65**, Geometric 23–24, **B21–B26, B53–B55, 32, 47, 65**, from Delphi **B21**, Roman 135, **E33–E41**
 - jug or amphora, Byzantine or Frankish **F41**
 - jug or jar, Archaic 61, **C185–C188**, Geometric **B56**
 - kantharos, Archaic 35, 53, **C104–C127, 56, 64**. *See also* Argos. Geometric **B1, 26, B28–B33, B50–B52 (?)**, 32, at Phteri (Achaia) **B38**, Middle Helladic (Minyan) 11, **A2, 150**
 - kantharos or cup. *See* cup or kantharos

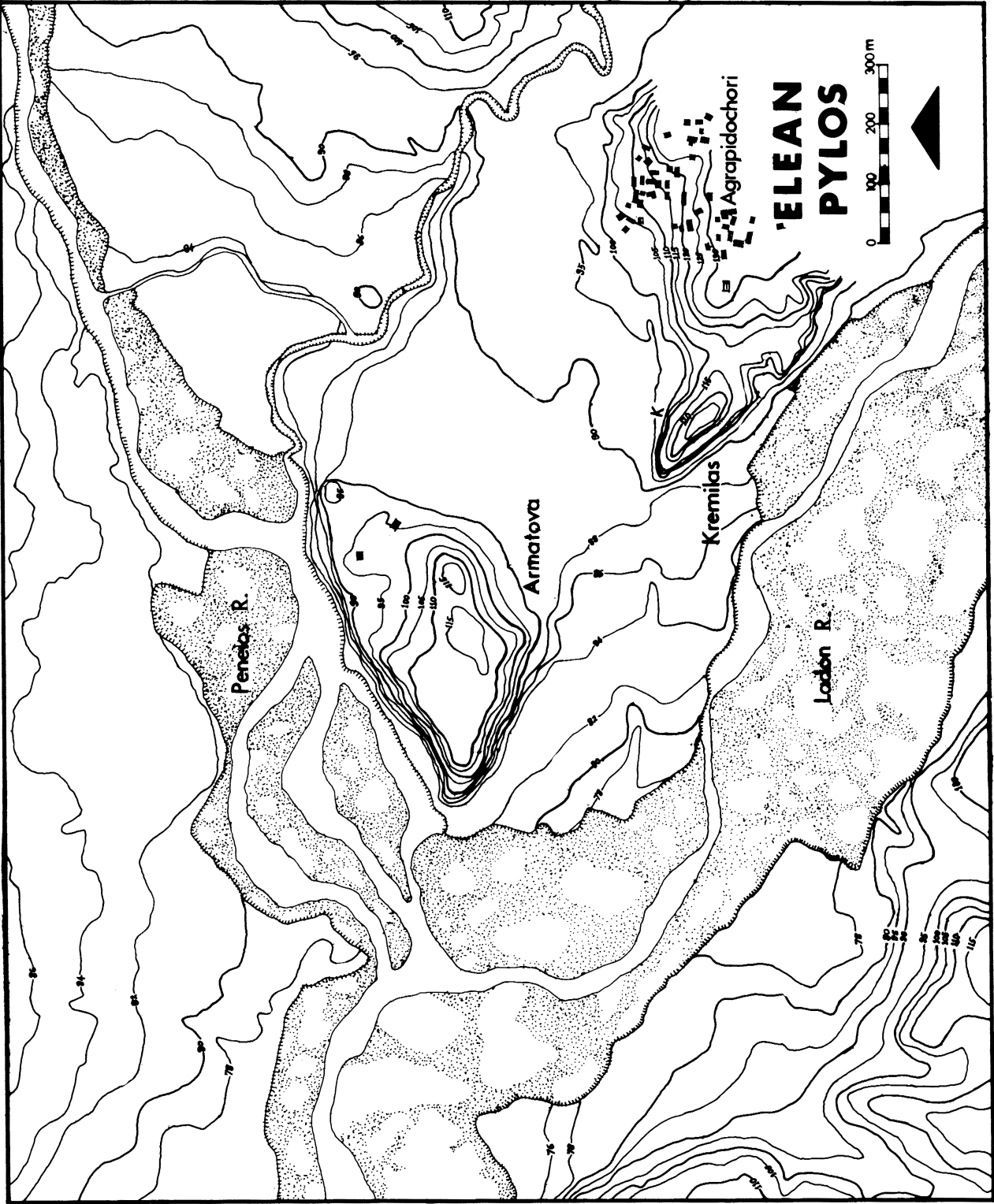
- krater, Archaic 35, 36, **C1–C25**, **C55**, **C72**, 64, Classical 107, 113, **D238–D249**, **D283**, **E57**, Geometric 19–20, **B1–B20**, **B36**, **B38**, Protogeometric from Derveni (Achaia) 19
- lamp filler (?), Classical **D237**
- lekythos, Classical 113, **D230–D236**, **D276**, **D279–D282**, at Vounargou 113, squat 107, **D218–D229**, **D278**
- lid, Archaic 58, **C138–C142**, Classical **D260–D263**
- lid, large and covers, Classical **D304–D308**. *See also* cover
- oinochoe, Archaic 35, 49, **C74–C83**, 64, Classical **D215–D217**
- open shape, Archaic 59, **C143–C169**
- pan, Archaic 61
- pelike, Classical 107, **D214**
- pithos, Archaic, inscribed 61, **D314**, Geometric **B68–B72**. *See also* Pottery shapes, cover, lid; Pithos burials
- plate, Archaic 36, 43, 46, **C54–C63**, 64, Classical **D250–D257**, **D266**, **D274**, **D275**, **D284**, **D285**, Roman **E26**
- pyxis, Archaic, 58, **C136**, **C167**, **C168**, 64. *See also* Pottery shapes, lid; Tocra. Geometric **B48**, Classical 114, **D258**, **D259**
- skyphos, Geometric. *See* Argos; Corinth. Classical 6, 109, **D190–D198**, **D264**, **D272**, **D273**
- stand, Archaic **C190(?)**, **C191(?)**, Classical (louteria?) **D309–D313**
- Pottery styles: “Dipylon style” vases 22
- Corinthian. *See* Corinth, pottery
- Orientalizing 22, 33. *See also* Elis, pottery; Olympia, pottery
- Protoattic **C1**, **C54**, Eleusis Amphora **C1**
- Protocorinthian **B33**, **B44**, **B45**, **B49**, 32, 33, **C55**, 50, 58, **C146**
- Protogeometric 19, 32
- Thapsos class **B1**, **B2**, 26, **B34**, 33
- “thin stacatto style”, Geometric 32
- Pylas, son of Kleson 158, 164
- Pylon, son of Kleson 158, 159, 160, 164
- Pylos 164; Bronze Age 164; in Elis v, 1, 3, 7–8, 18, 32, 34, 40, 67, 68, 71, 149, 155, 158–161, 161³, 162–165; Homeric 158, 159, 163, 164, 165; Messenian Pylos 160, 164, 165, 165⁸
- ROBERTSON, M. 19
- Roman, Late 9, Part G *passim*
- Roman period 4, 8, 68, Part E *passim*; cemetery 34, 89, 122–138
- See also* Roman, Late
- Runnels, C.N. 16
- SANDAMERI village 161
- Sandameri ridge (Sandmeriotiko) 161, 162³, 163, 164⁴
- Schiering, W. 107
- Sellêeis River 157, 158
- Skollion 3, 157, 161, 162³, 163
- Skollis 161, 162³
- Spartan-Elean war 7, 155
- Sperling, J. 1
- Spindle whorls: Archaic **C206–C210**; Geometric **B77**
- Spoollike weights 7, 68; Archaic 62–63, 68, **C196–C205**; Classical 62–63, 75, 100–102, **D105–D141**; at Mycenae 102; at Perachora 63, 102
- See also* Argos; Corinth; Makryisia; Olympia; Olynthos
- Stimana, stream. *See* Mana
- Stone: button, Byzantine or Frankish **F15A**
- flaked (chipped) stone, “Bronze Age” at Sidari (Kerkyra) 16, Mesolithic at Franchthi Cave 16, Middle Helladic v, 11, 15–17, **A50–A63**, Palaeolithic 16, prehistoric in Classical contexts 80, 88. *See also* Halieis; Obsidian
- ground stone, Middle Helladic 11, **A47**, at Malthi **A47**
- Strabo 8, 156–158, 161, 161³, 163, 164, 164⁵
- Stratos 162³
- TERRACOTTA: bobbin, Archaic **C211**; cylinders, Classical **D168**, **D169**; figurines, Classical 68, **D78–D81**; miscellaneous **C212**, **C213**, **D171**; plaque, Classical **D142**

- See also* Lamps; Loomweights; Pottery; Spindle whorls; Spoollike weights; Tile
- Thalamai, Pylian assault 8, 156
- Themelis, P. G. 1, 4, 6, 11¹, 18, 18¹, 70, 73, 81, 87, 92, 121, 122, 123, 139, 151, 164⁴
- Thraistos 155
- Tile: burials, tiles from, at Dion 153; at Philia 152; at Thessaloniki 153. *See also* tile-built; tile-covered; tile-floored
- roof, Archaic 34, Laconian 35; Classical, Corinthian 66, 82, 87, 106, **D164–D167**, Laconian 66, 73, 79, 83, 87, 104, **D143–D163**; Byzantine or Frankish 141, 153, “Laconian” 141, 146, **F22–F30**
- tile-built graves: Kalyvia 123
- tile-covered graves: 152–153; at Asine 152; Palaeo-Christian at Glykis 146, 152; at Nea Anchialos 152. *See also* Elis; Olympia
- tile-floored graves, at Maximianoupolos 120
- Tocra, pottery 46, **C54**, 64, 114
- Tombs, in Achaia and Messenia, Geometric pottery 32; Late Helladic chamber tomb 5, 11¹. *See also* “Tymboi I and II”
- Tritaia 162⁽³⁾
- “Tymboi I and II” 4, 11¹, 121, 139, 146, 151, 152, 153. *See also* Themelis
- VOLLGRAF, W. 102
- WARES: “Adriatic” ware 12
- “African Red Slip Ware” **E10**
- gray (Minyan), Middle Helladic 12, 12². *See also* Chlemoutsis; Pharai
- Matt Painted, Byzantine or Frankish 147, 149, Middle Helladic 12
- South Italian 107
- West Greek pottery, Archaic 53, Geometric 19, **B1**, 24, 26, 28, 32, Protogeometric 19. *See also* Elis; Olympia
- Wells: Archaic 16, 34, 47, 62, 100, 122. *See also* Olympia; Classical 34, 66, 68, 81, 85–86; Geometric 5, 18, 19, **B1**, **B34**, 35, 48, 70, 72, 74, 85
- Wesseling, P. 155
- XENOPHON 3, 8, 68, 71, 155–156, 163

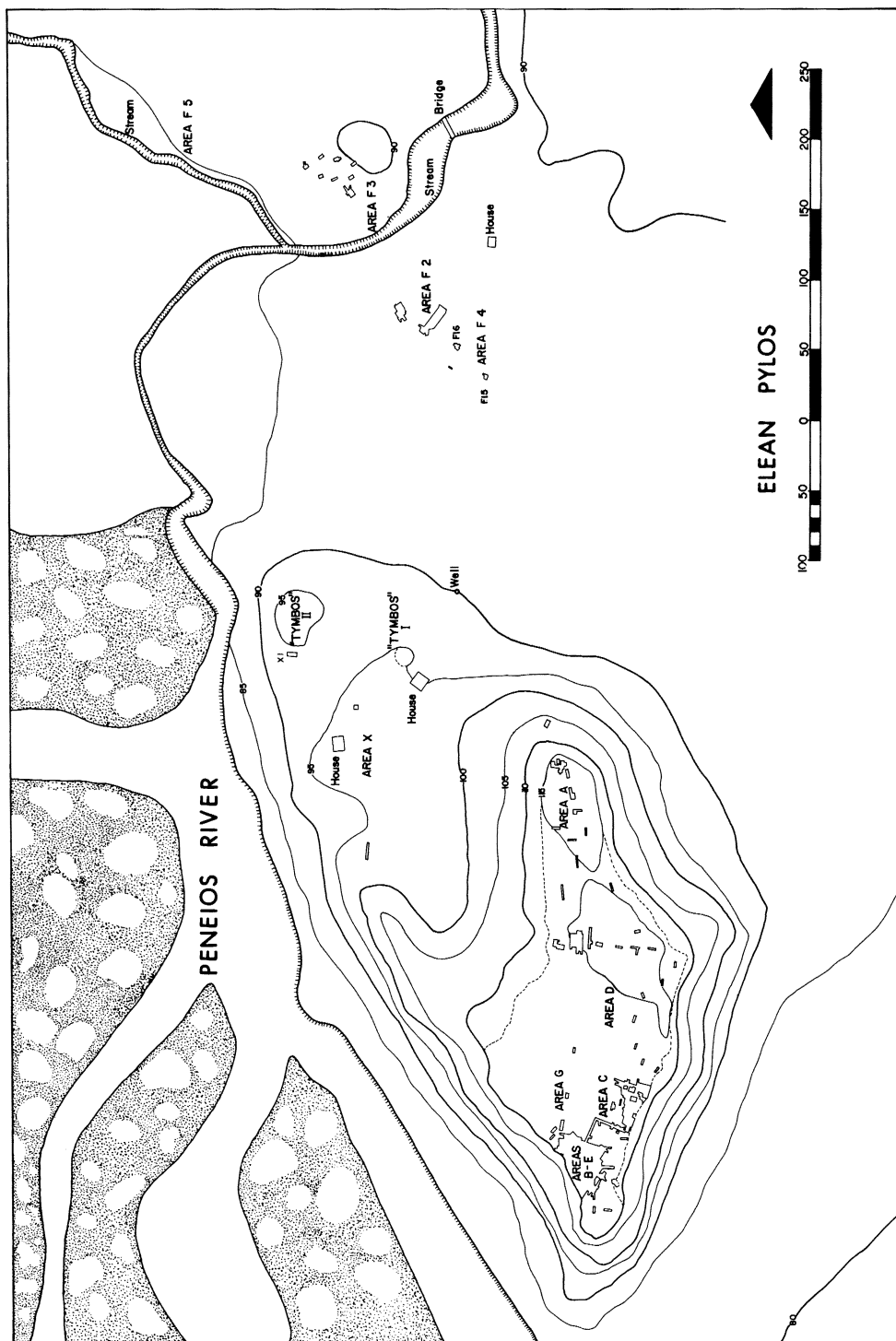
MAPS FIGURES



Elis



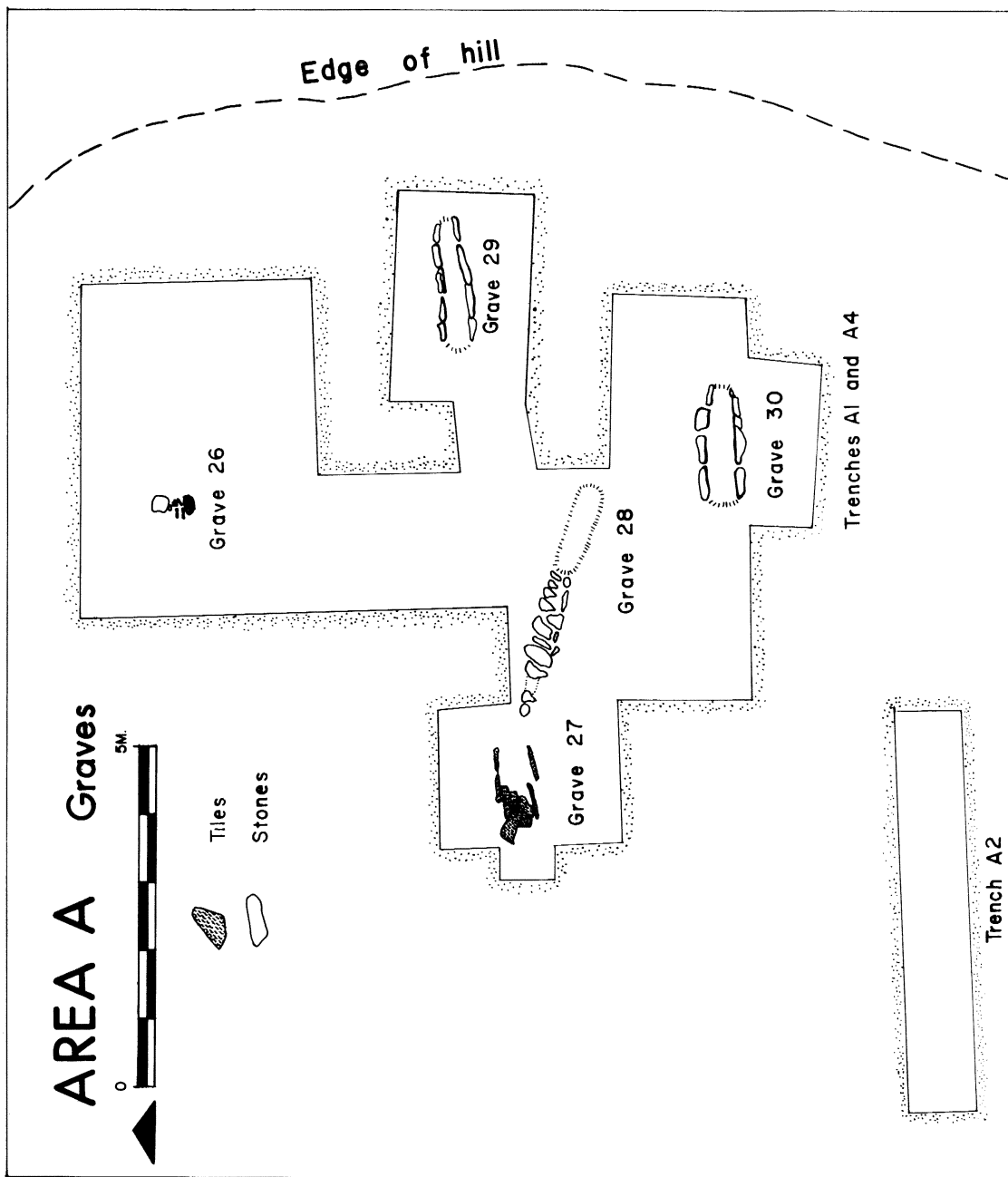
Armatova and Vicinity



Excavated Areas

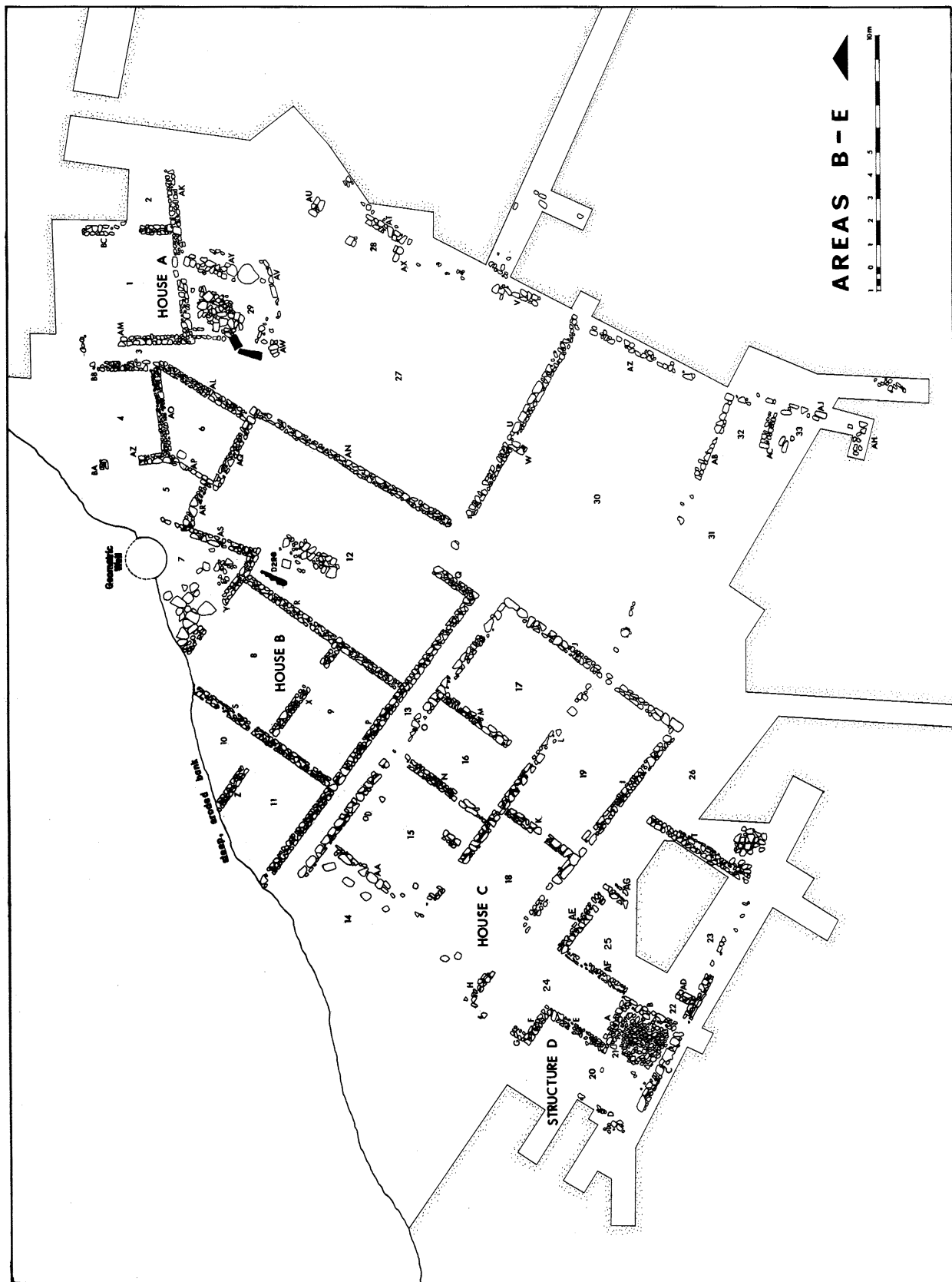
Hilltop: Excavated Areas and Trenches

FIGURE 1



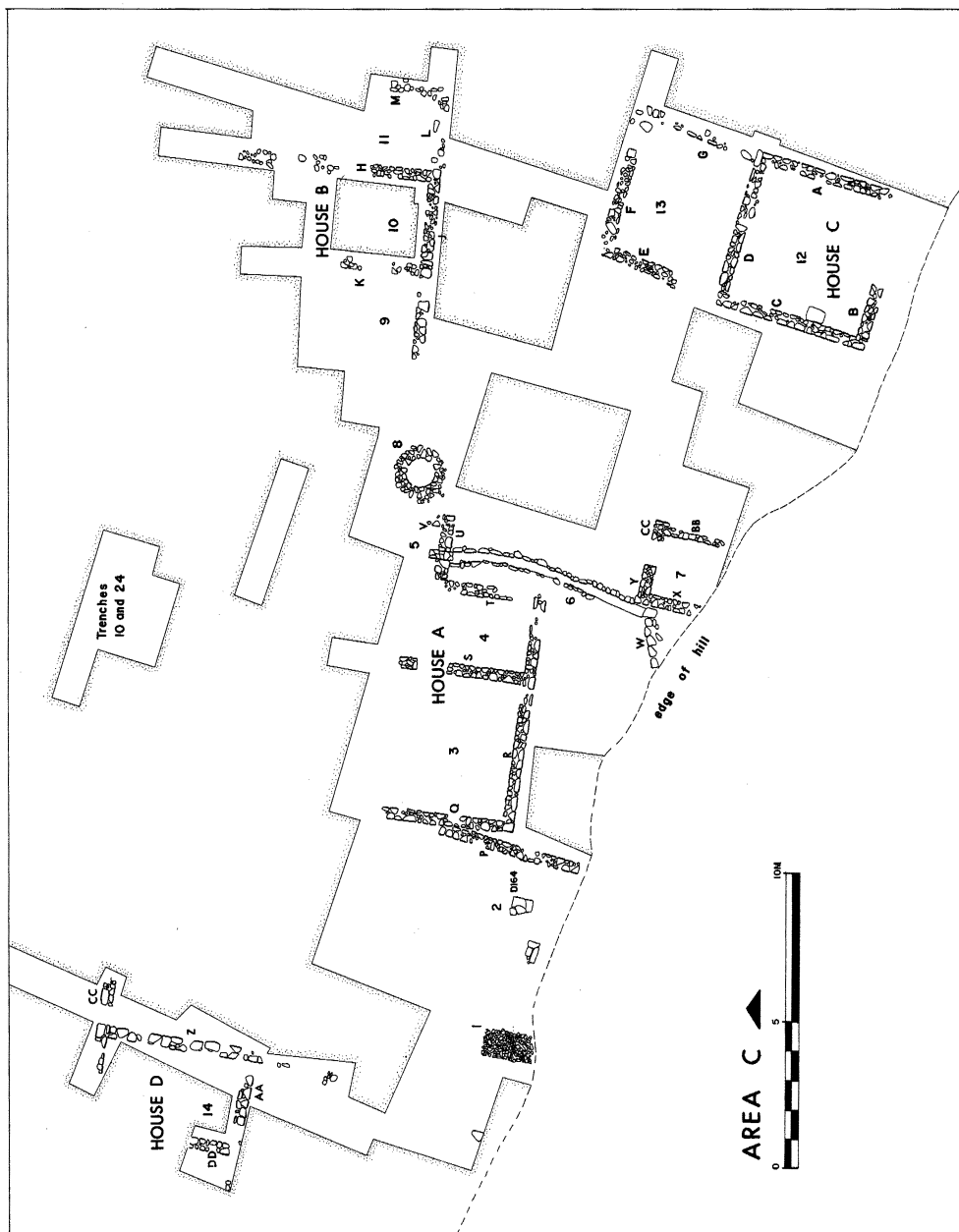
Plan of Area A, Eastern End

FIGURE 2



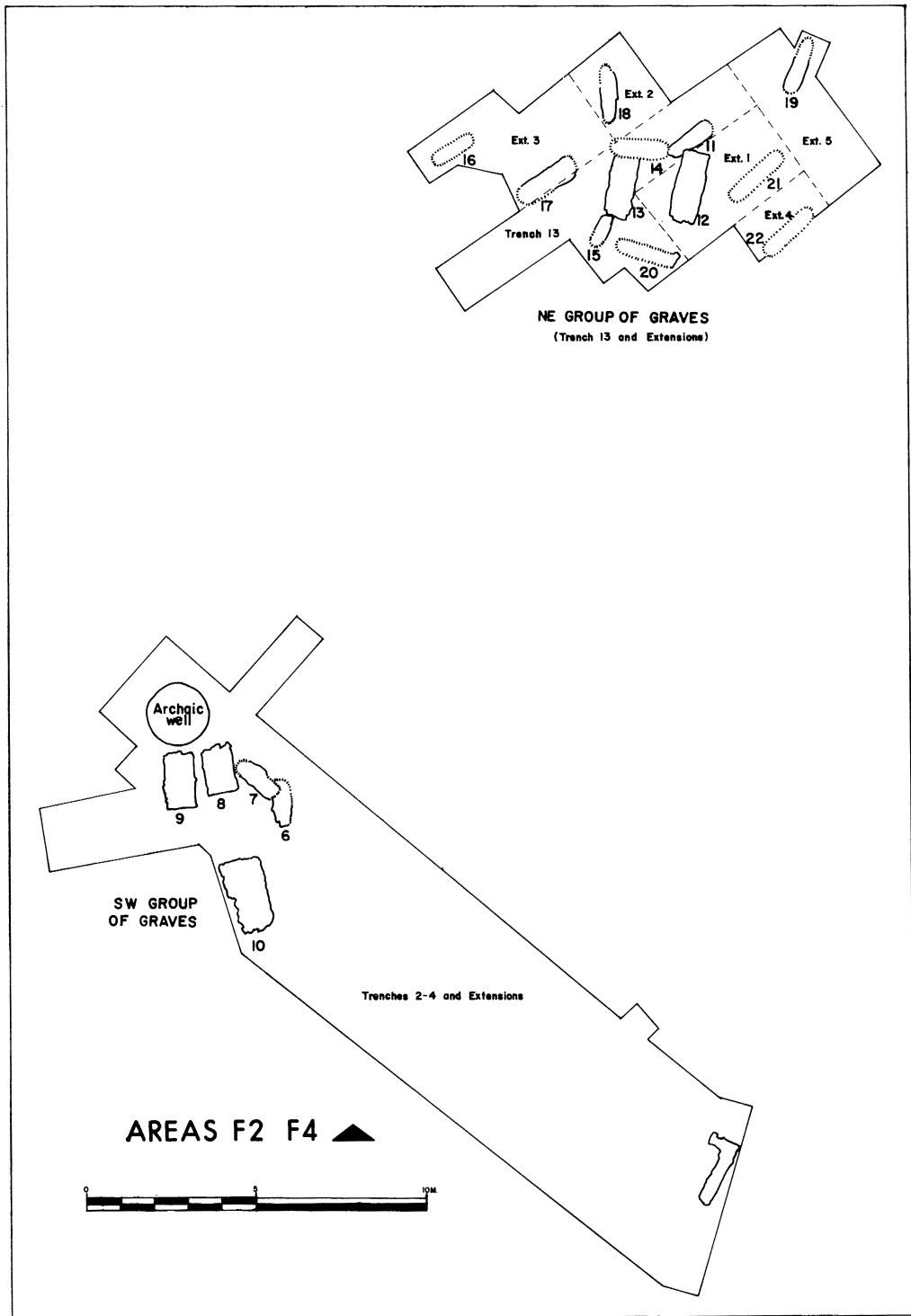
Plan of Areas B-E

FIGURE 3

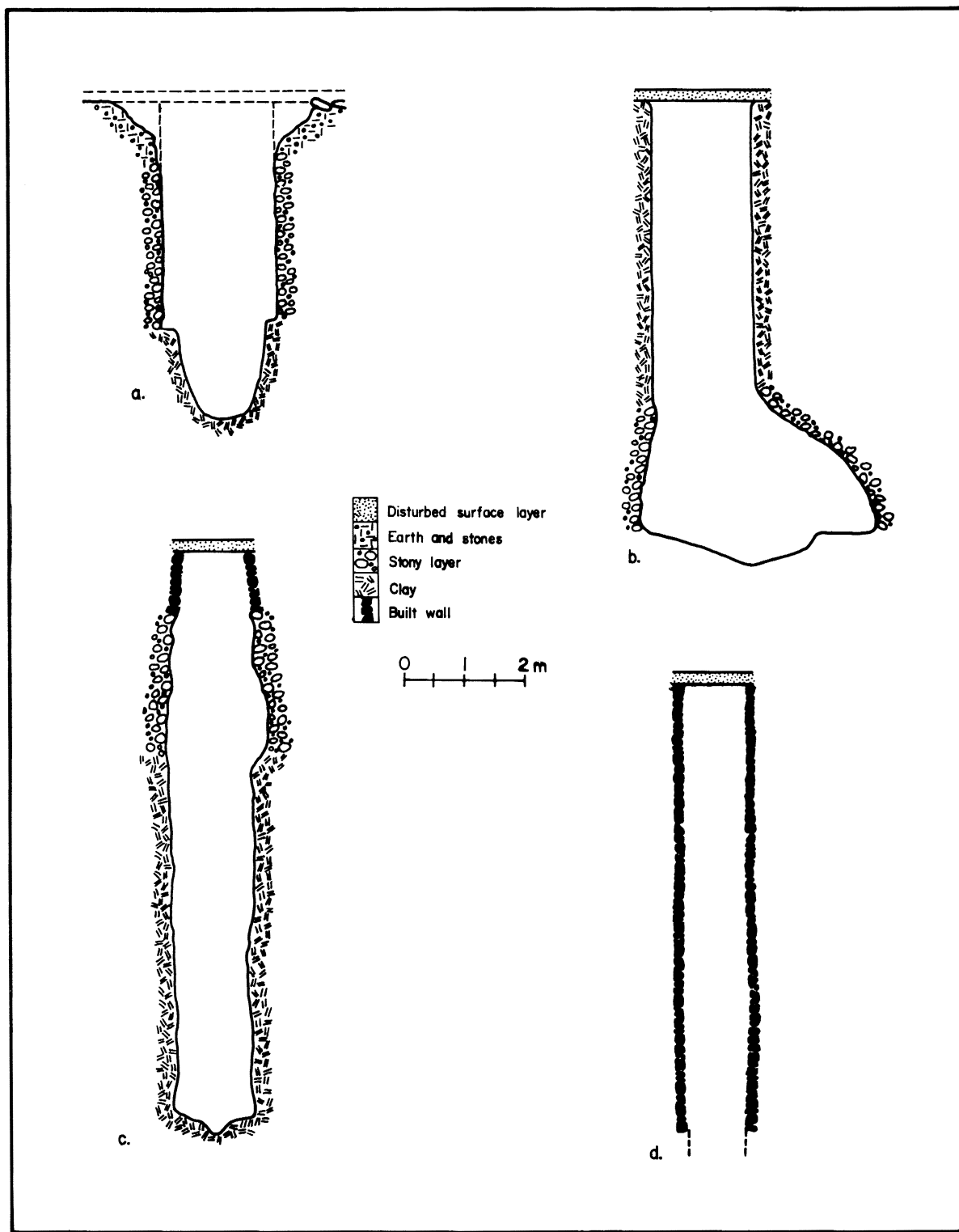


Plan of Area C

FIGURE 4



Plan of Areas F 2 and F 4



Schematic Sections of Wells

a. Geometric b. Archaic c. Classical Well 8 in Area C d. Classical Well in Area F 4

PLATES



a. The Ladon River and Armatova from the southwest. Mt. Sandameriotika (Mt. Skollion) in the background

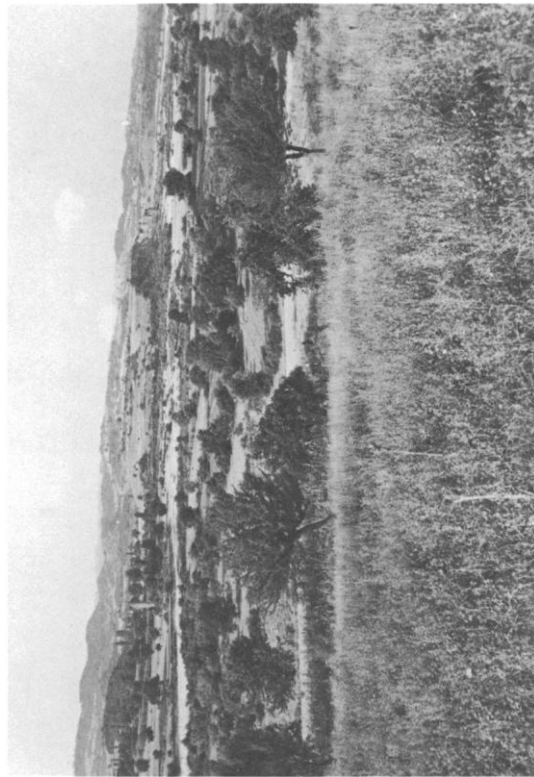


b. Armatova in the Peneios Valley, from the southeast

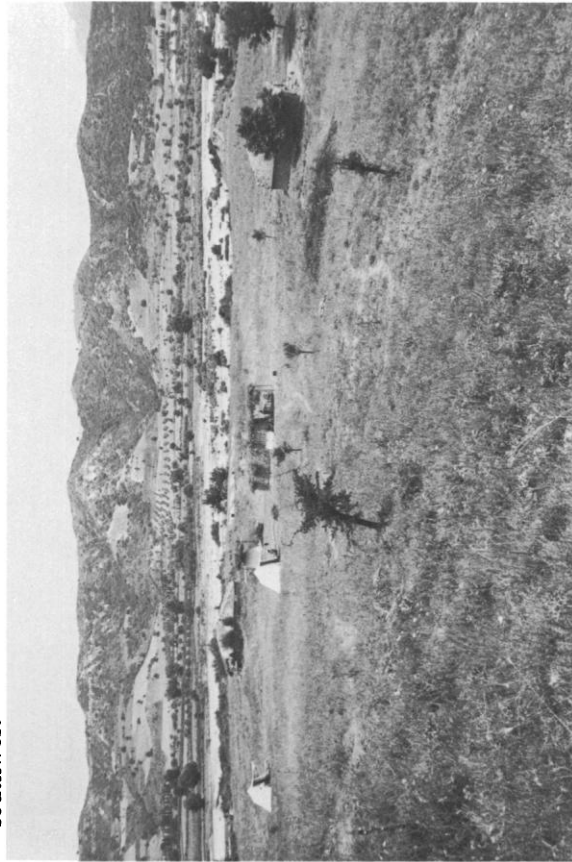
PLATE 2



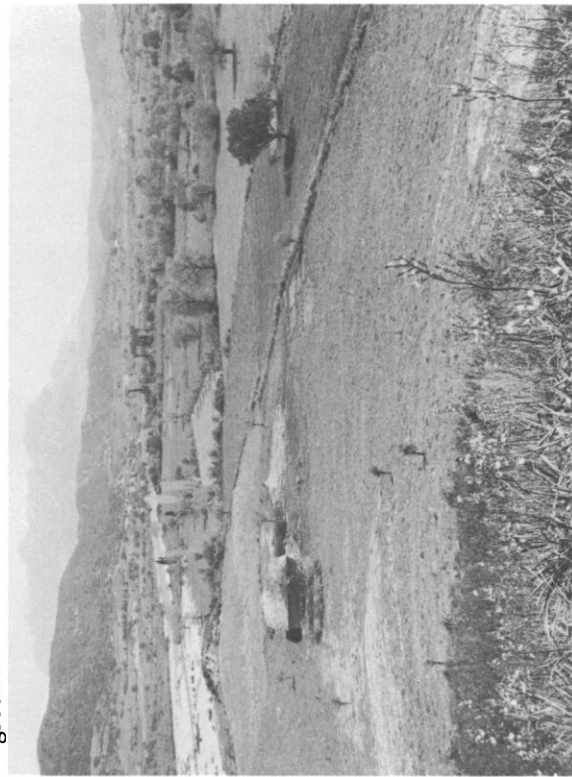
a. Armatova and the confluence of the Ladon and Peneios Rivers from the southwest



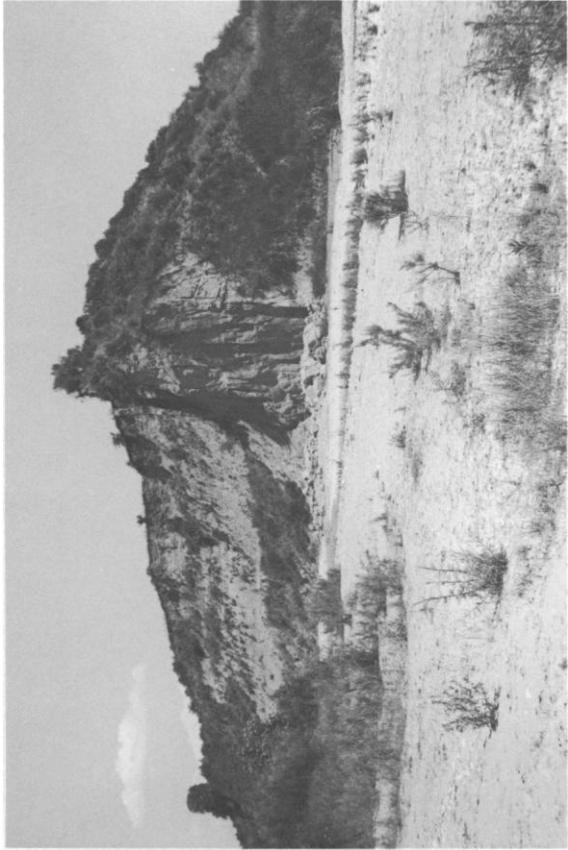
b. The Peneios Valley from the northeast, Armatova in the middle ground



c. The Peneios Valley and the "northeast plateau", from the southwest



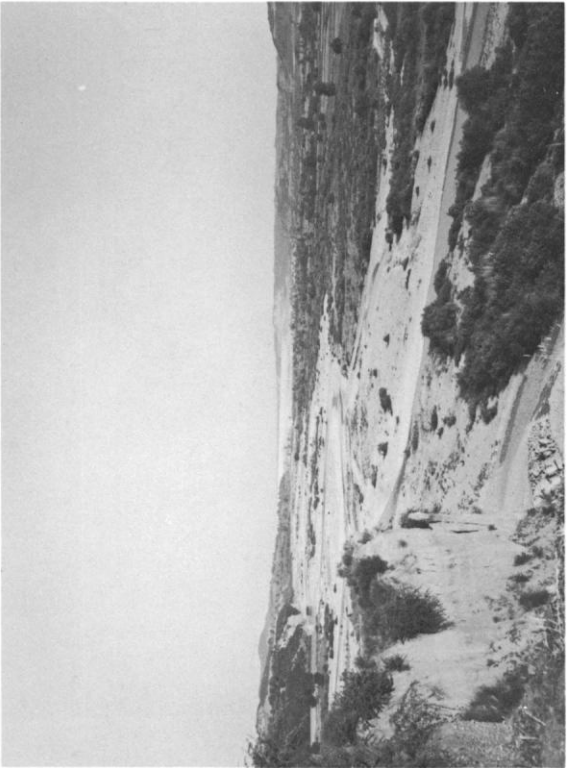
d. The Peneios Valley looking northeast from Armatova



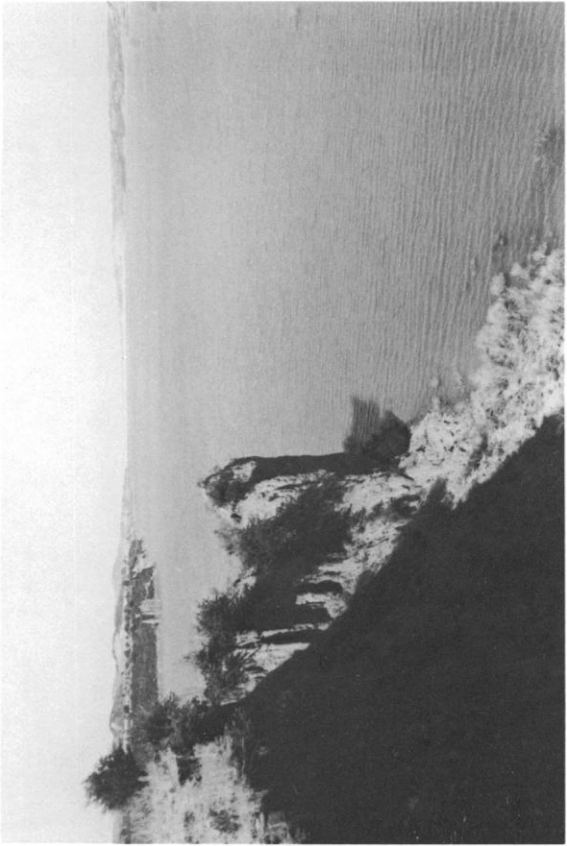
a. The western end of Armatova from the west



b. The eroded northwestern edge of Armatova from the southwest



c. The Peneios Valley from the east as viewed from Armatova, the dam at Kendron visible in the distance



d. Same view as c, in 1970 after the partial filling of the storage lake

PLATE 4



a. Tymbos II (Themelis) from the southwest



c. Tymbos I (Themelis) to left of house, from the northeast



b. Geometric well from the west



e. The Geometric well from the west-northwest



d. The northwest edge of Armatova from the northwest, the Geometric well near the center



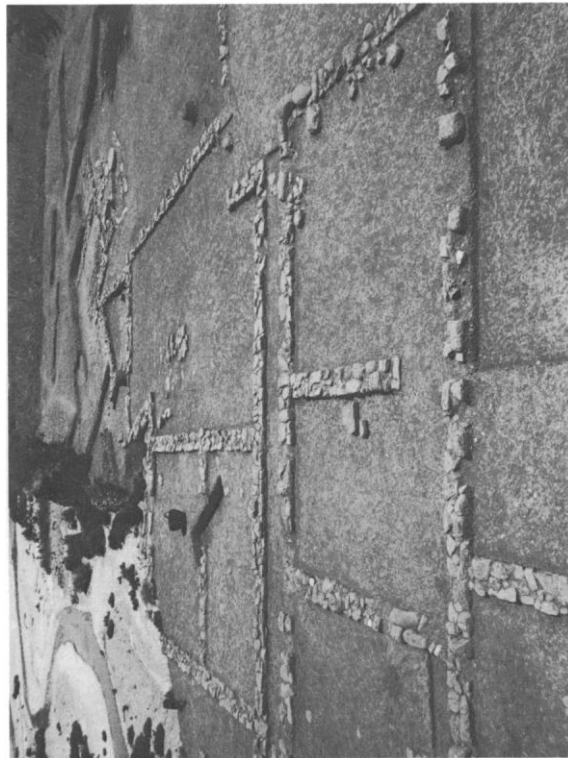
f. The Geometric well during excavation from above, south side



a. General view from the northeast during excavation



b. Same view as a, excavation completed: House B, foreground, and House C



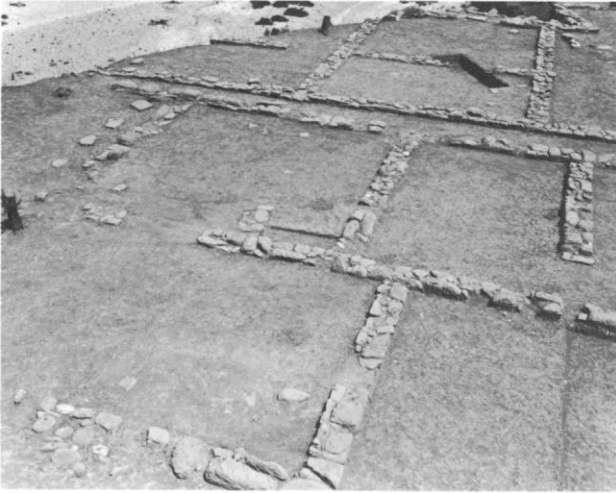
c. Partial view from the southwest: House C, foreground, and House B



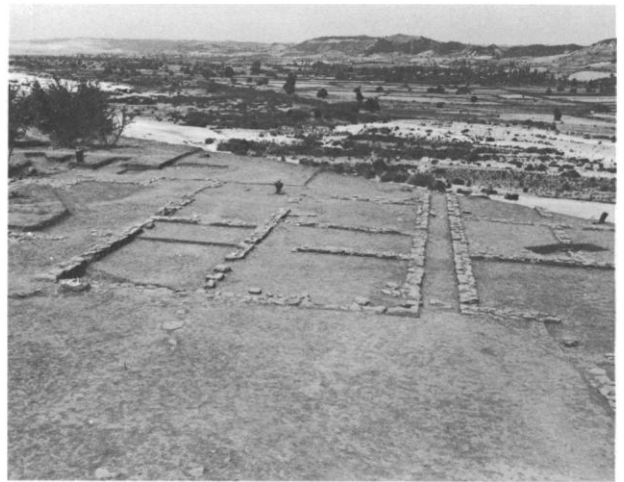
d. Southwestern part from the east: House C at right

Areas B-E

PLATE 6



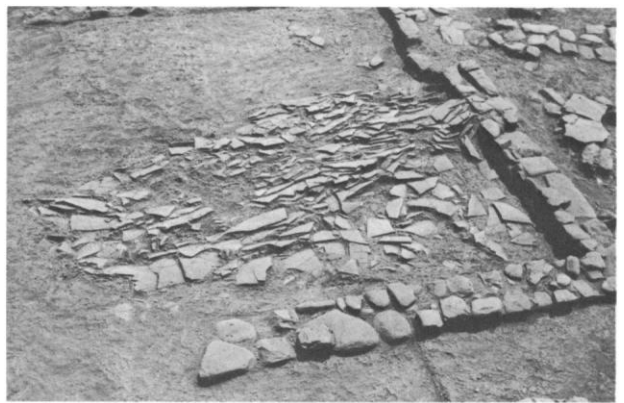
a. Partial view from the southwest: House C, foreground, and House B



b. Partial view from the southeast: House C, center, and House B



c. Structure D: Room 21 from the northwest



d. House A: Room 1 from the northwest



e. Courtyard 12 from the northeast

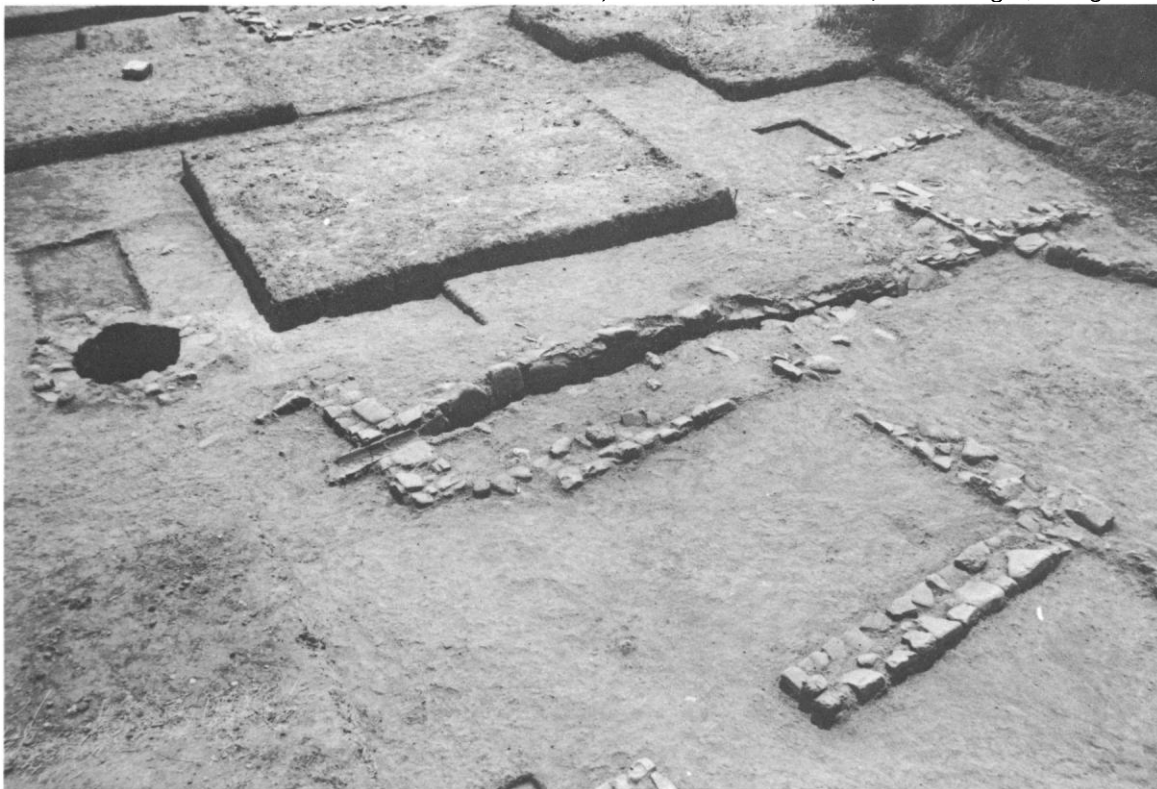


f. Structure D: Walls AE and AF from the northeast. Room 21, background

Areas B-E

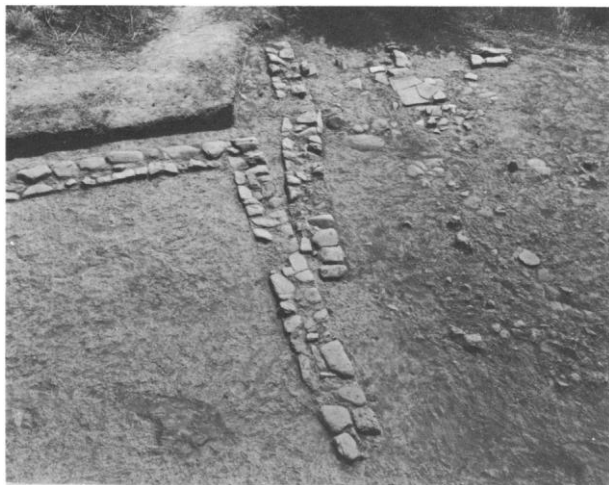


a. General view of Area C from the northwest: House A, center. Houses B and C, left and right, background

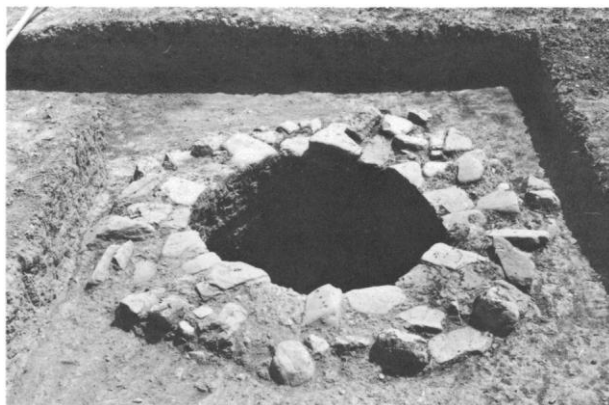


b. Central part of Area C from the northwest: House A, Room 4, foreground

PLATE 8



a. House A: Walls P and Q from the north



b. Well 8 from the north



c. Pit 1, paved with tiles, from the south



d. House C: Room 12 from the southeast

Area C



e. Room 7, before clearing, from the north-northeast



f. Room 7 from the south



a. Classical house from the west



b. Well from the east

Area F 4



c. Wall A and paving, from the west



d. General view from the north. Grave 1, foreground

Area F 5



e. Grave 1 from the west



f. Grave 2 from the west. Possible tile grave, foreground

Area K

PLATE 10



a. Trench 1 from the west



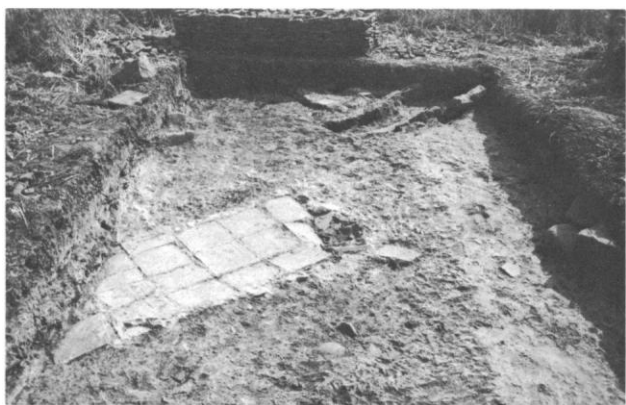
b. Trench 1, Wall A from the north



c. Trench 7, Grave 5 from the southeast



d. Trench 2, circular structure from the southeast



e. Trench 6, southwest part from the northeast



f. Trench 6, Graves 3 and 4 from the northeast



a. The Archaic well and graves of the Roman period, from the north



b. The Archaic well from above, south side. Large stone *in situ*



c. View from Armatova toward the northeast (arrow indicates Area F 2)



d. Grave 6 from the south



e. Grave 7 from the northwest



f. Graves 12-15 and 20, from the north

PLATE 12



a. Grave 8 from the north



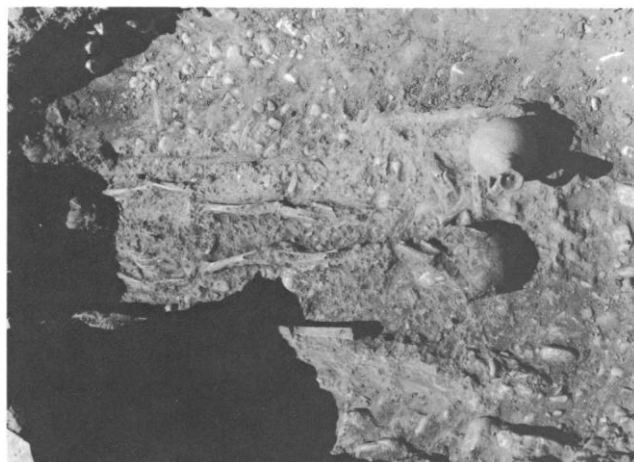
b. Grave 9 from the south



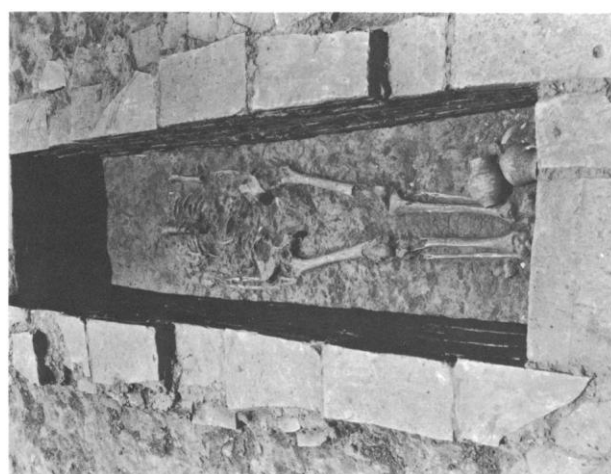
c. Grave 10 from the north



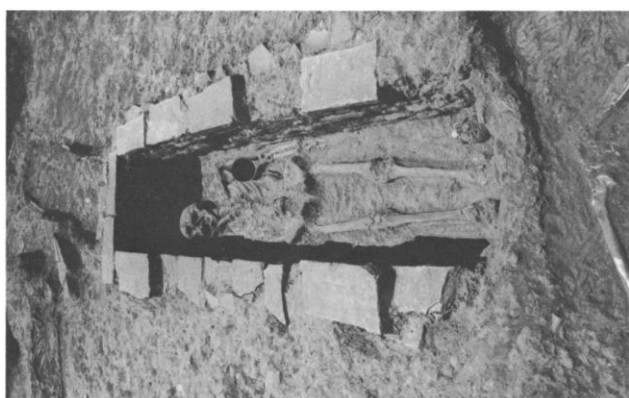
d. Grave 11 before removal of the cover, from the northwest



e. Grave 11 from the northeast



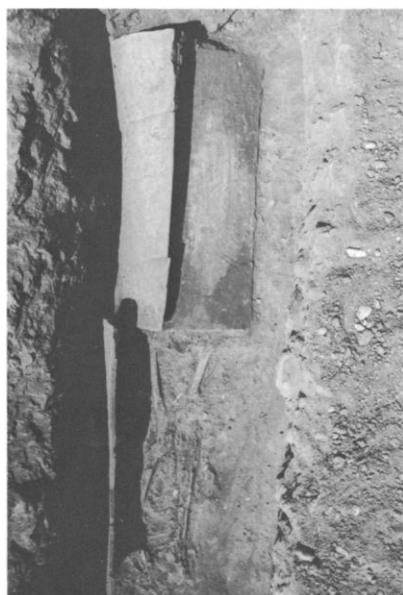
f. Grave 12 from the north



a. Grave 13 from the north



b. Grave 16 from the southwest



c. Grave 17 before removal of the cover tiles, from the southeast



d. Grave 17 from the northeast



f. Grave 19 from the north



e. Grave 18 from the north

Area F 2, Roman cemetery

PLATE 14



a. Area F 2: Grave 20 from the west



b. Area F 2: Grave 22 from the northwest



c. House of the Byzantine or Frankish period, from the east



a. Initial trenches from the south. Trench D9, left foreground



b. Room 1 partially cleared, from the south



c. Room 1 from the north



d. Room 2 from the northwest



e. Room 2, southwest corner from the north

House of the Byzantine or Frankish period

PLATE 16



a. Grave 23 from the east



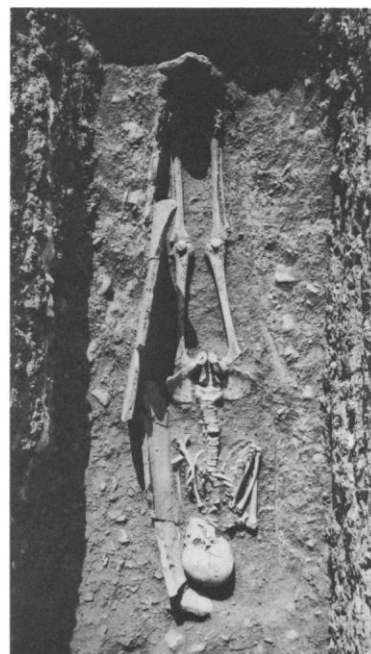
b. Byzantine or Frankish house, Room 3 from the east. Blocked doorway and tile-covered burial (Grave 24) beneath floor



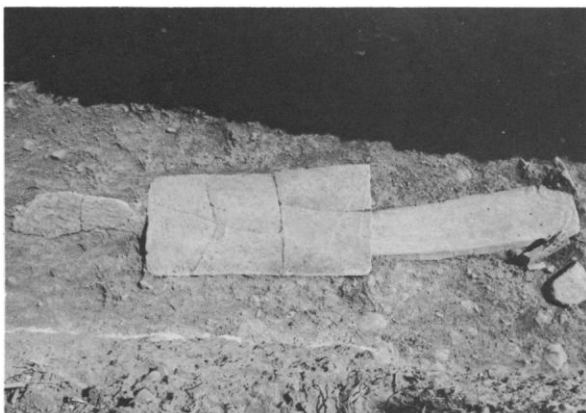
c. Grave 24 with cover, from the east



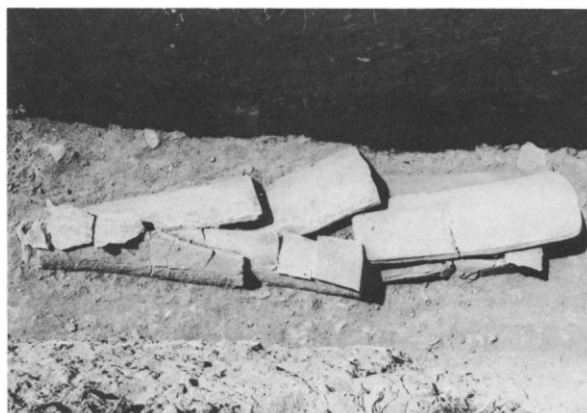
d. Grave 24 from the east



e. Grave 25 from the west



f. Grave 25, upper layer of cover from the north



g. Grave 25, lower layer of cover from the north



a. General view from the west



b. Eastern end of the hill from the northeast.
Grave 29, foreground



c. Grave 26 from the west.
Middle Helladic deposit
immediately to the east



d. Grave 27 from the west



e. Grave 30, cover from the east



f. Grave 30 from the east

PLATE 18



a. Area A, Grave 28 from the southeast



b. Area A, Grave 29 from the east



c. Limestone block in a field east of Armatova



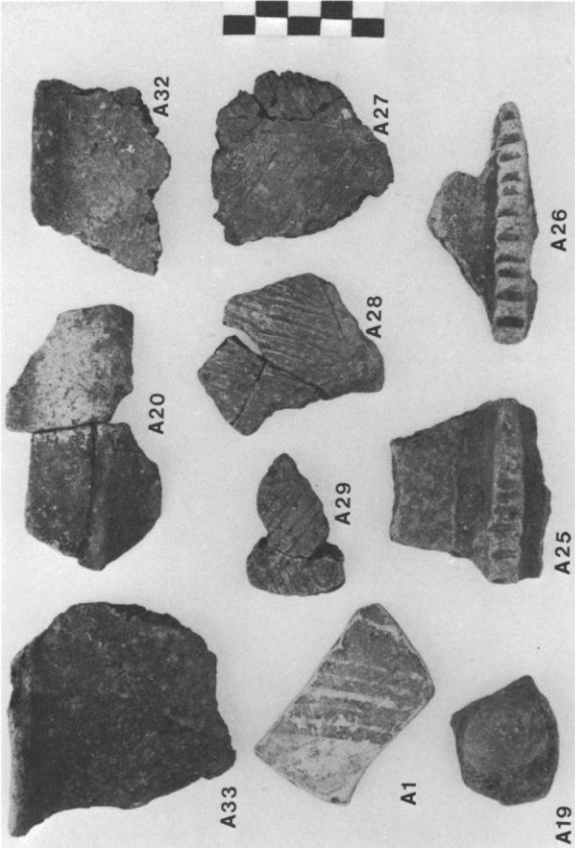
d. Bridge, probably recent, east of Armatova; from the southeast



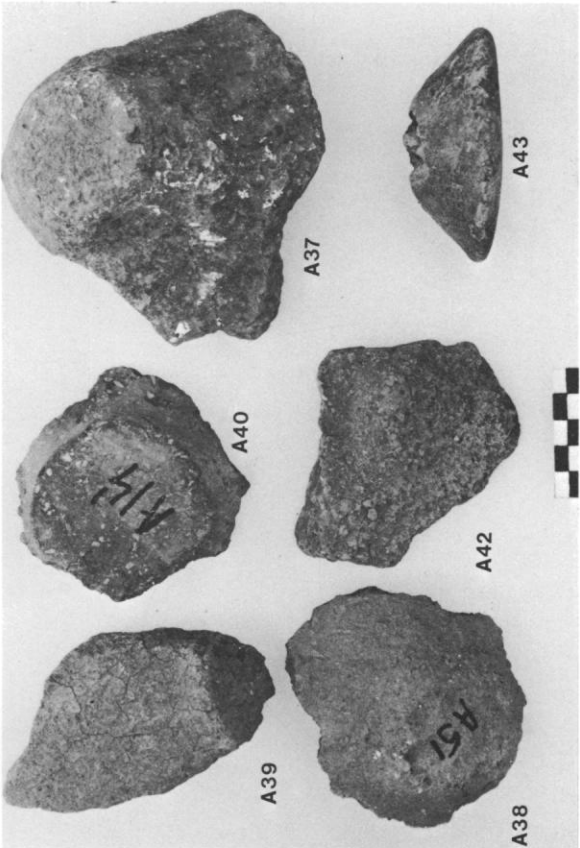
e. Area A, Grave 29, cover from the south



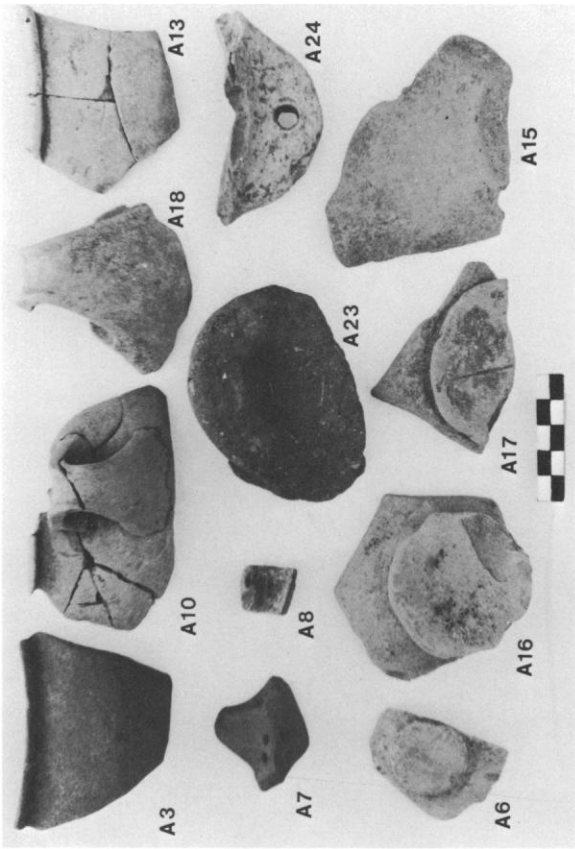
f. Ancient remains visible in a road cutting north of Agrapidochori, from the north



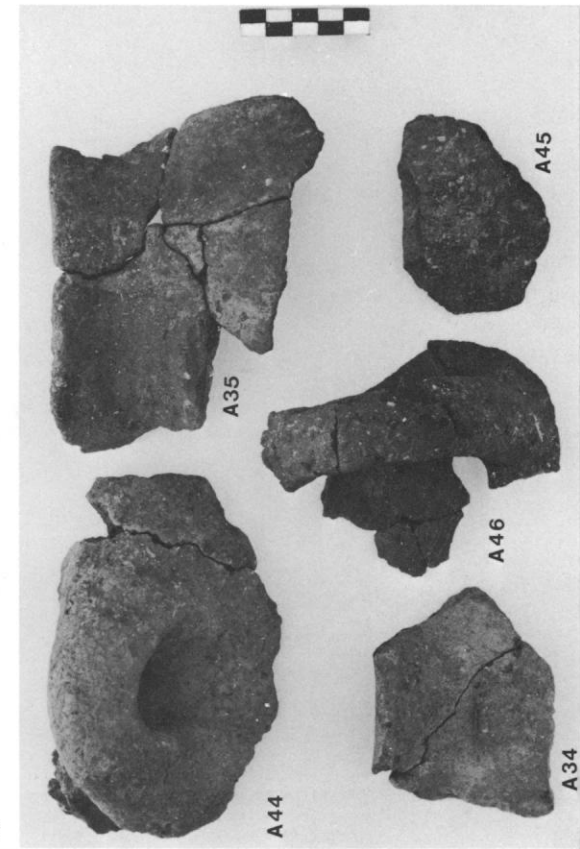
b.



d.

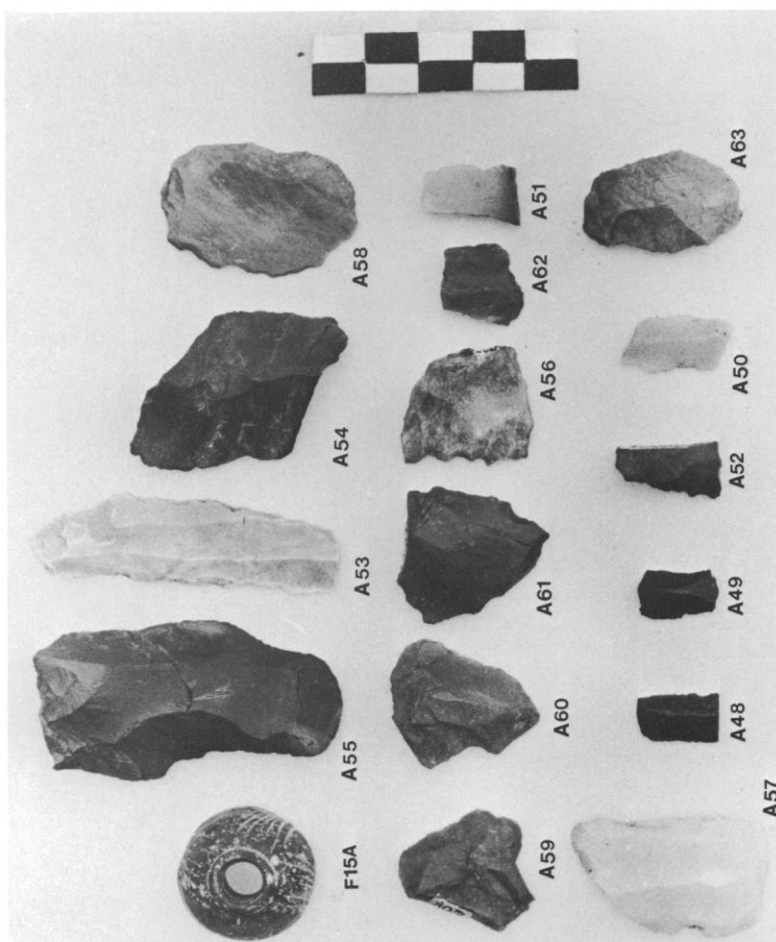
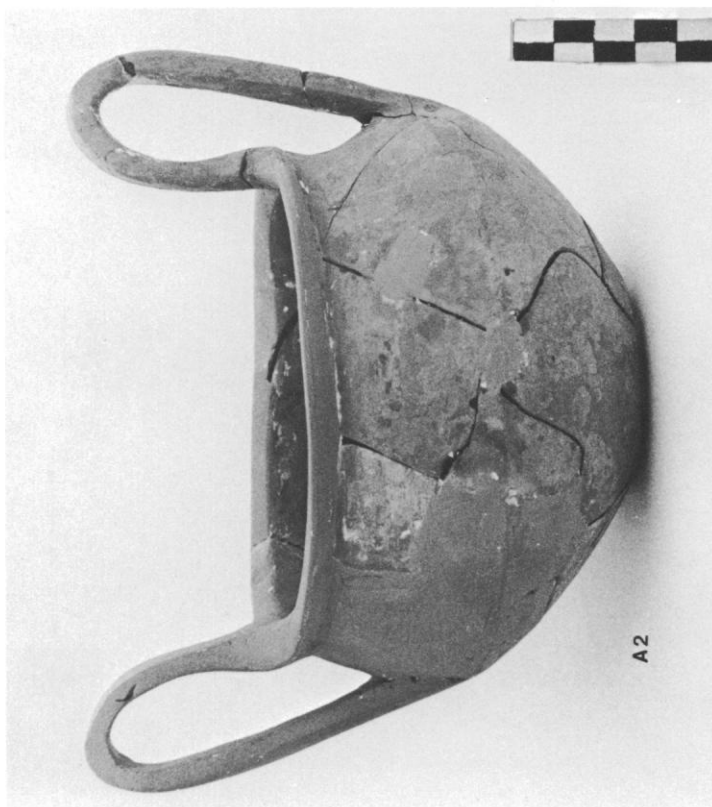
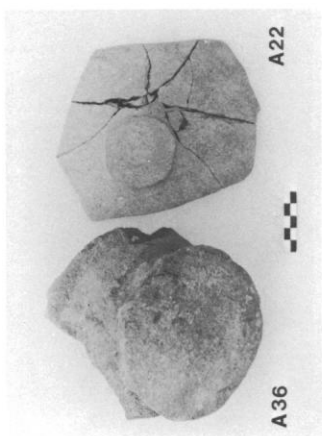


a.

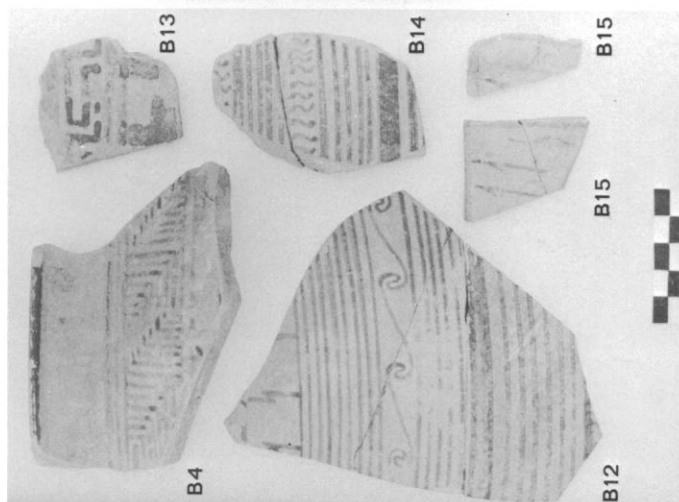
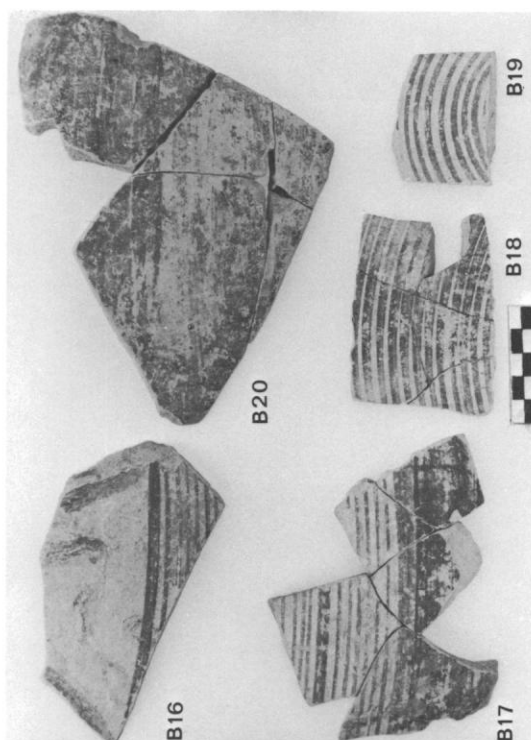
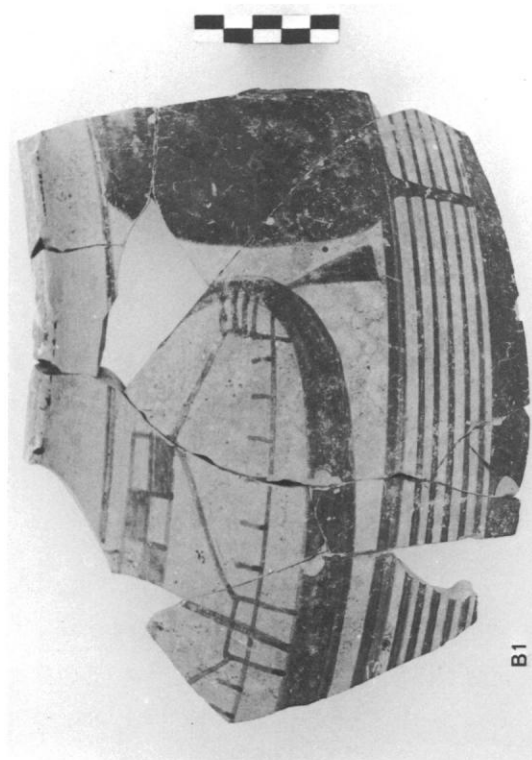
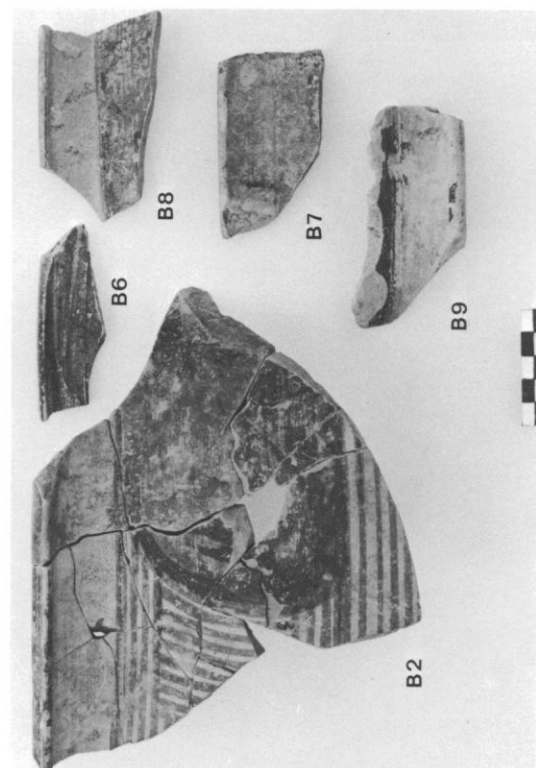


c.

Middle Helladic Pottery

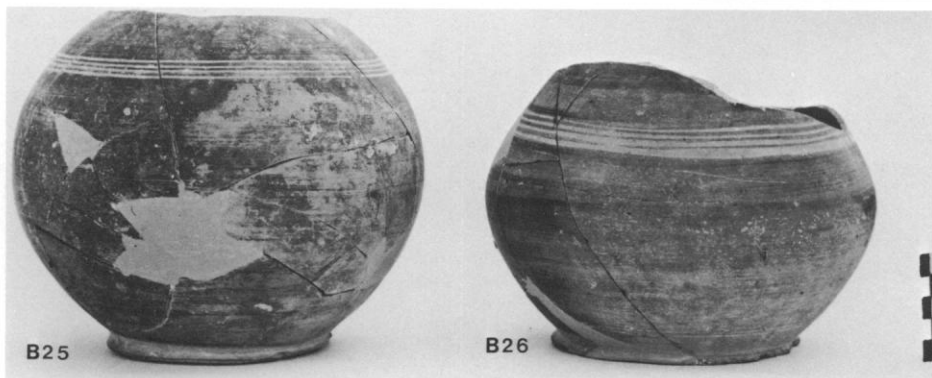
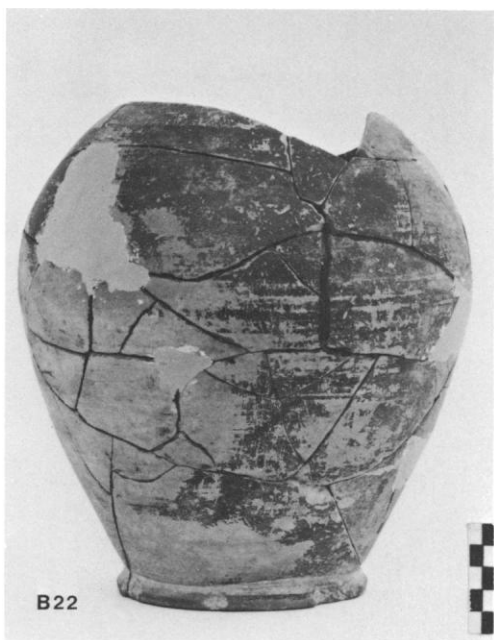
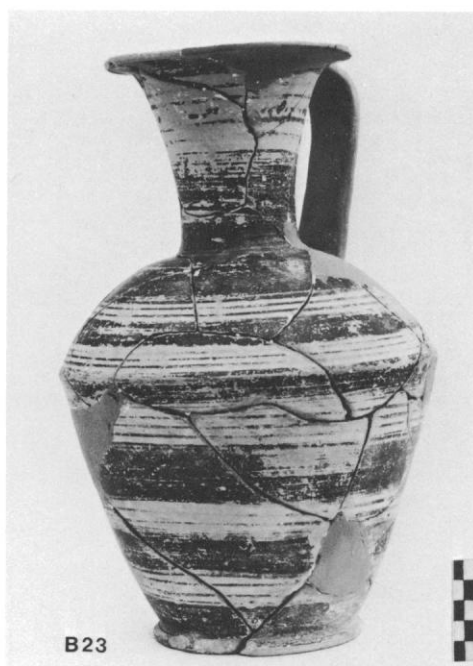


Middle Helladic Pottery and Objects of Chipped Stone. Byzantine or Frankish Button (F15A)

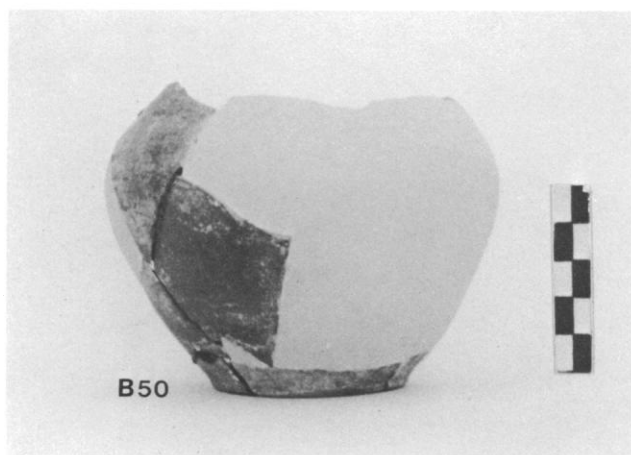
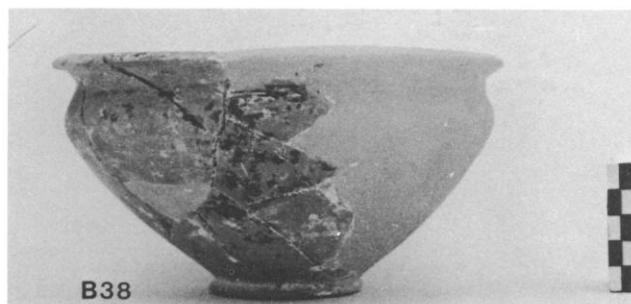
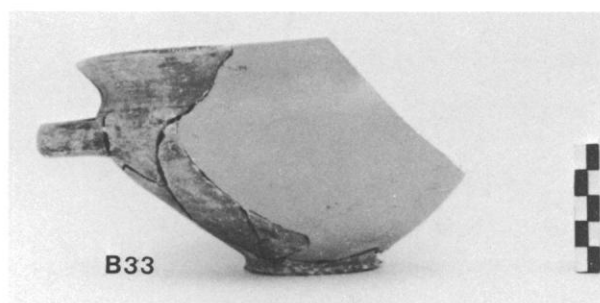
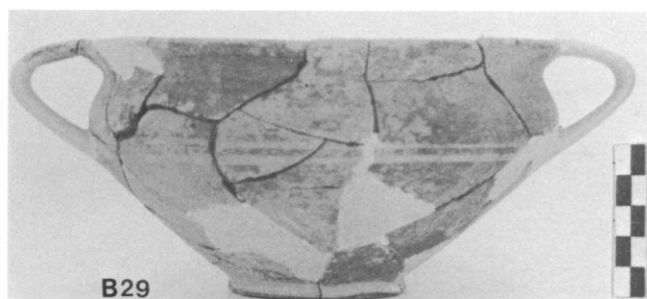


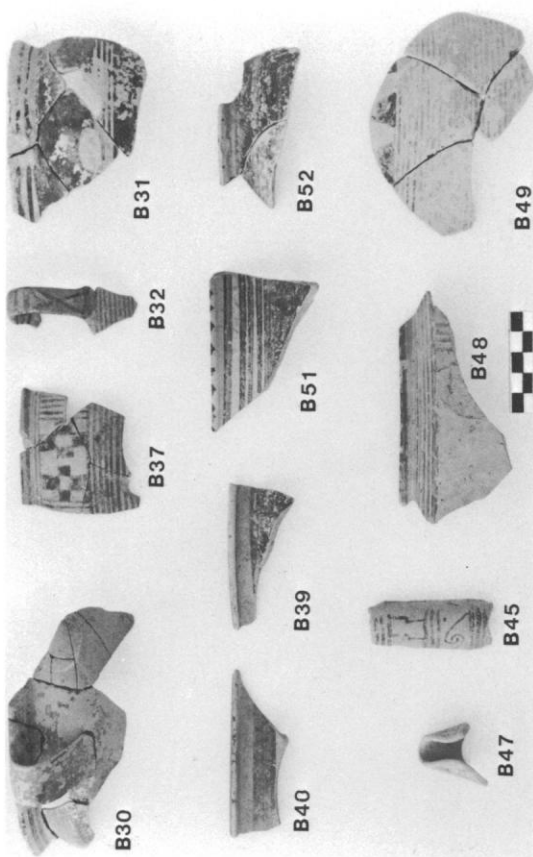
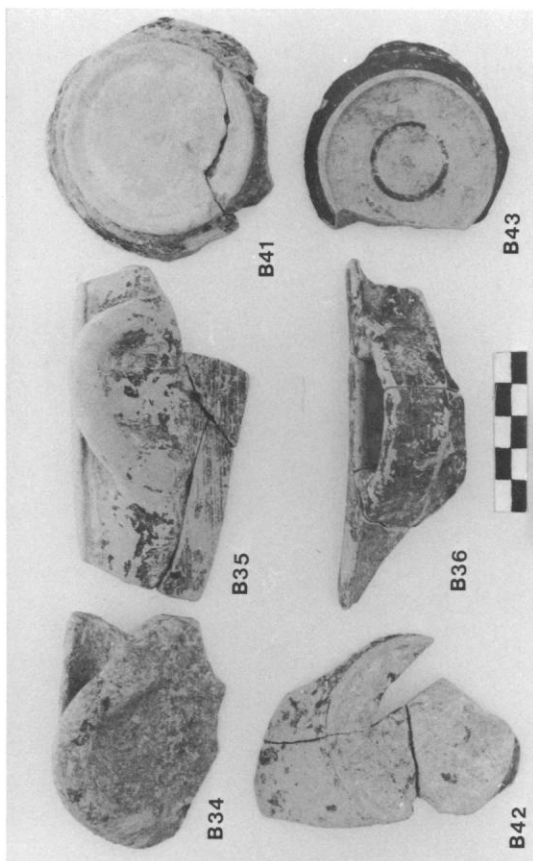
Geometric Pottery

PLATE 22



Geometric Pottery

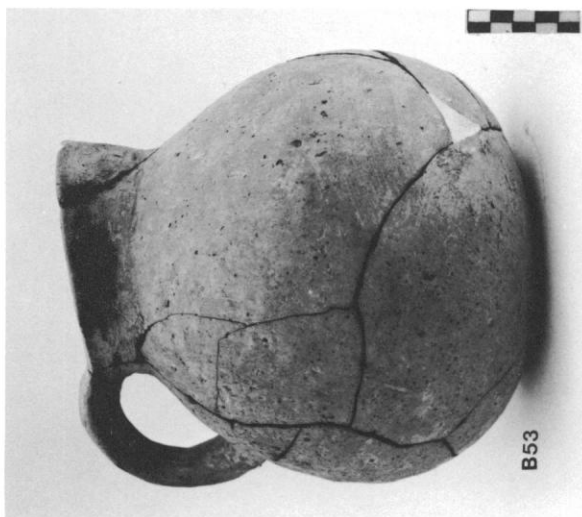




a.



b.



Geometric Pottery and Terracotta Objects

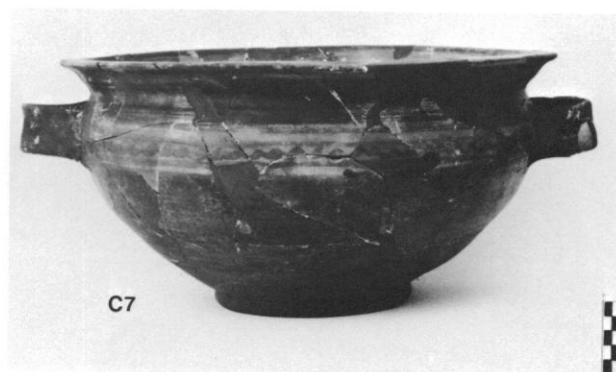
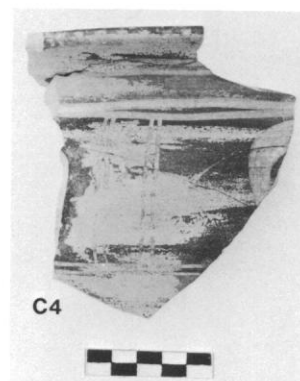
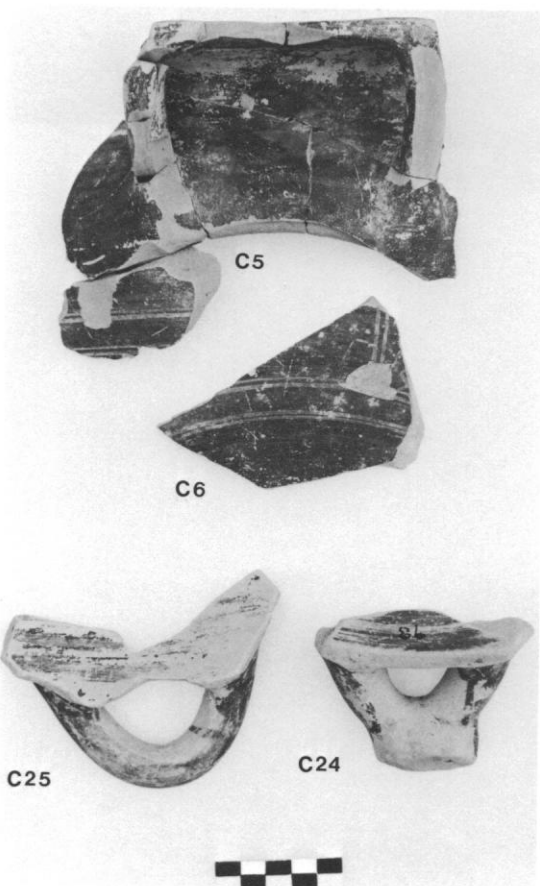
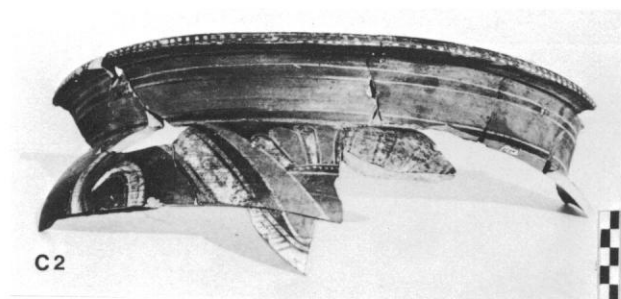
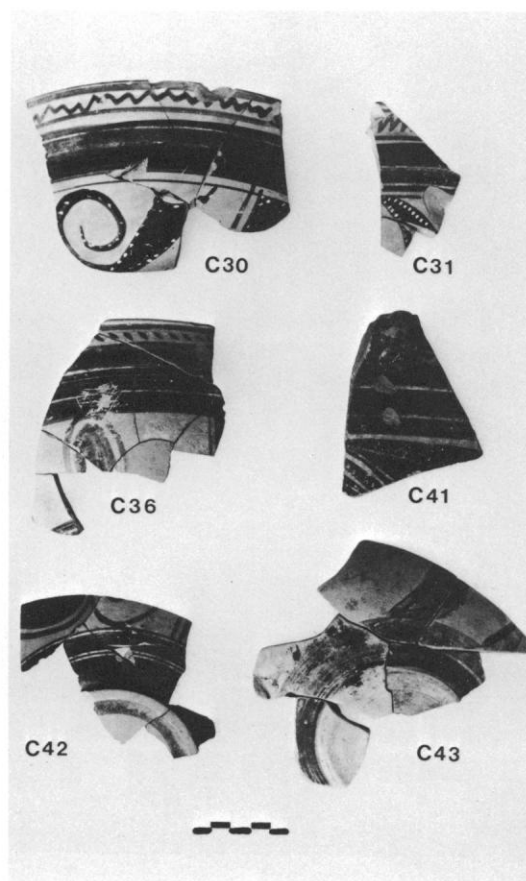
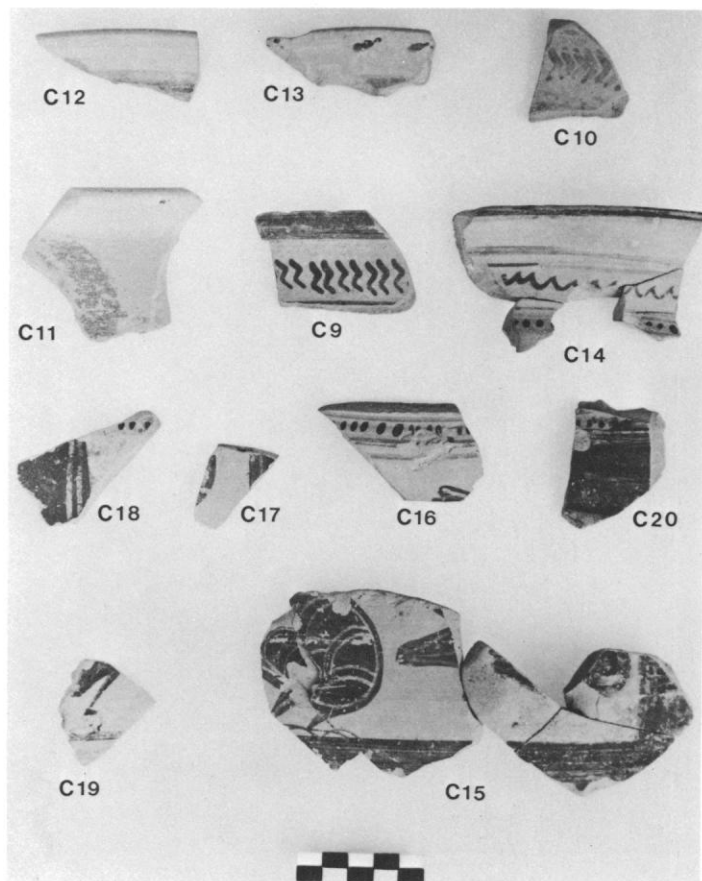
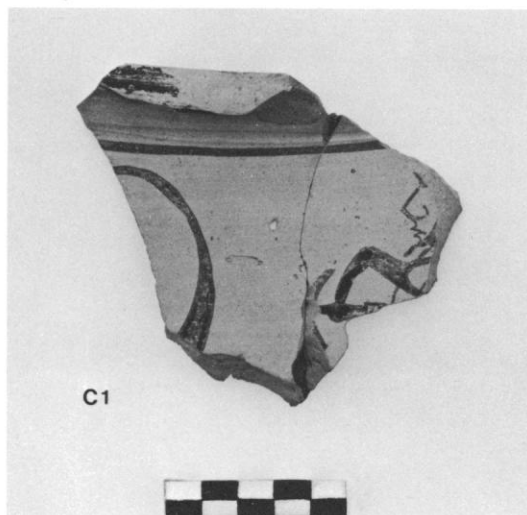
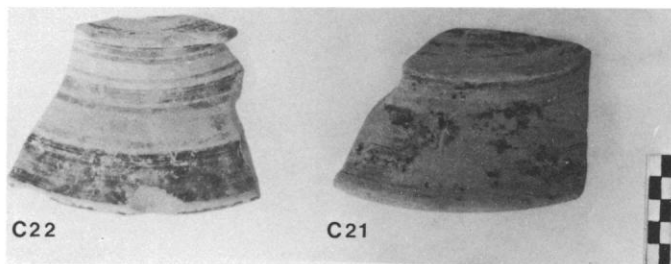


PLATE 26



Archaic Pottery

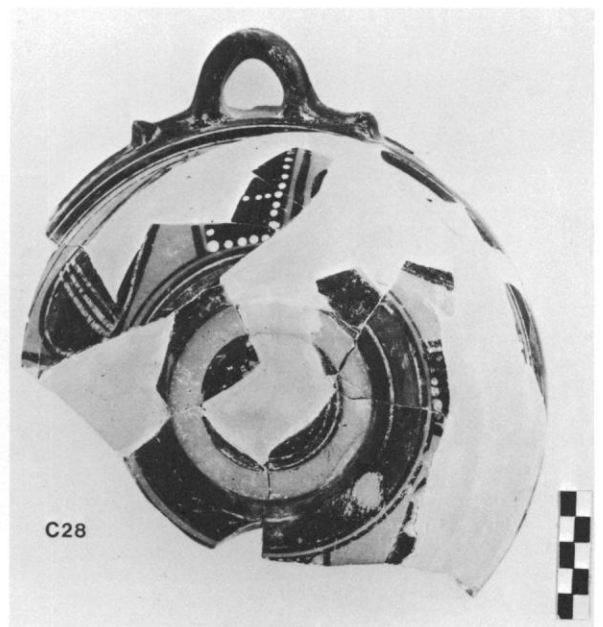
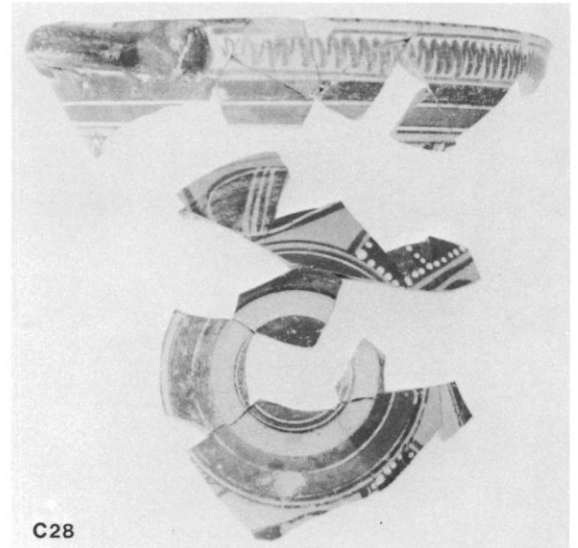
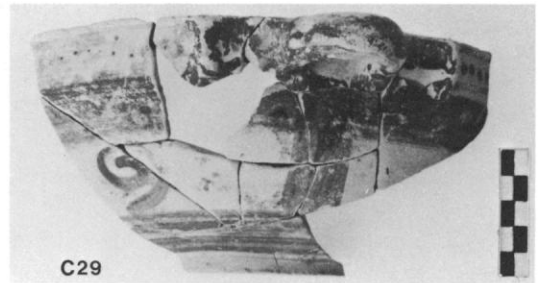
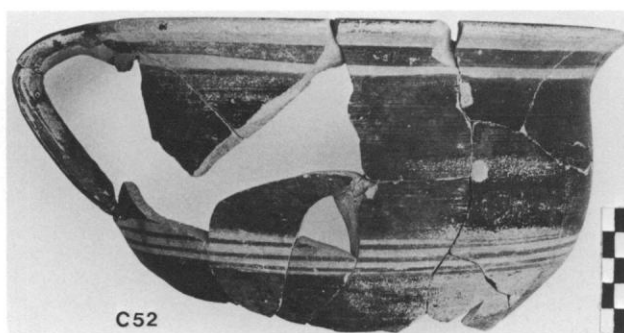
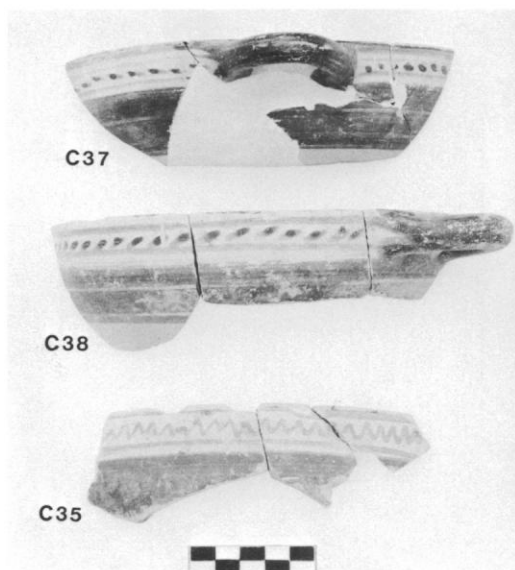
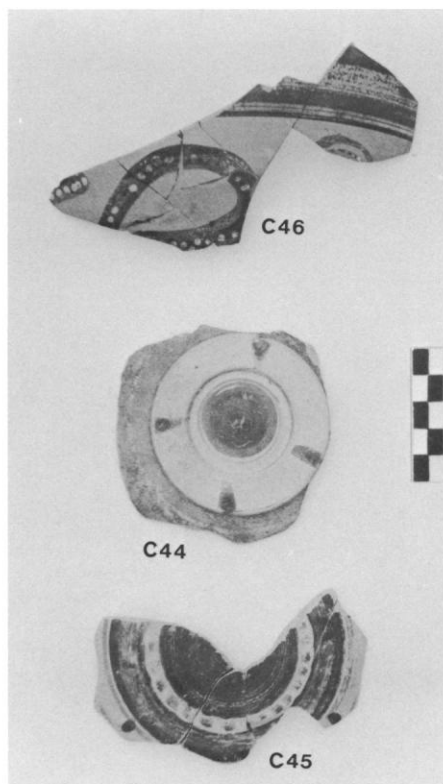
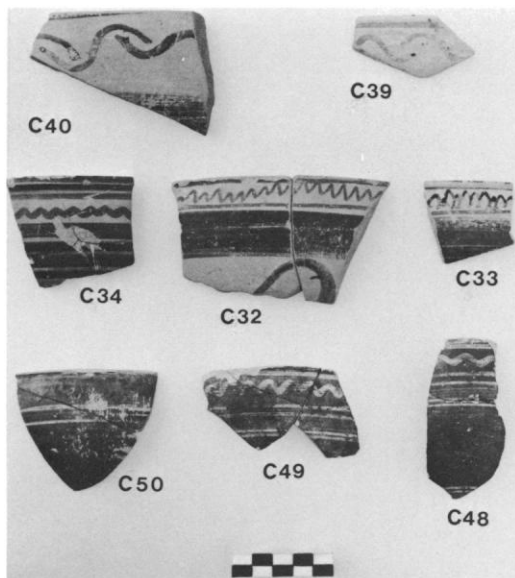


PLATE 28



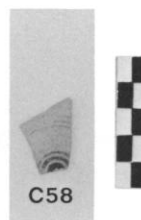
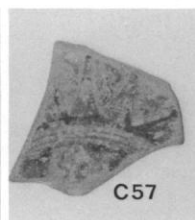
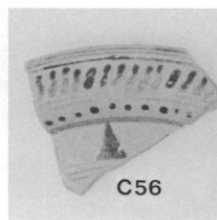
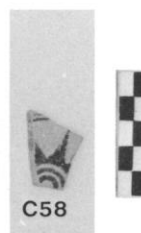
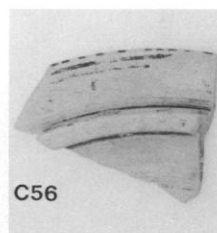
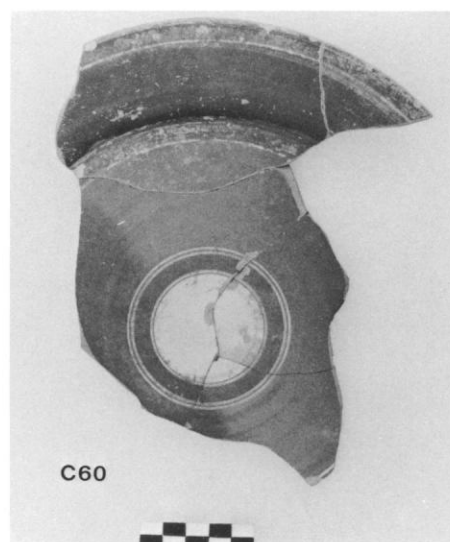
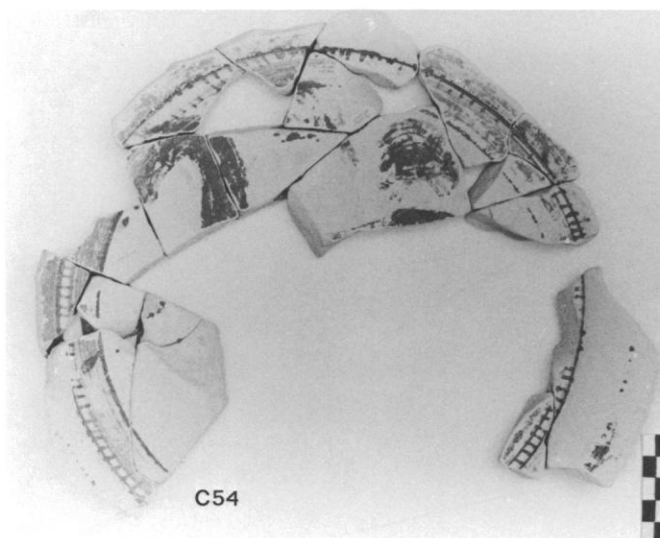
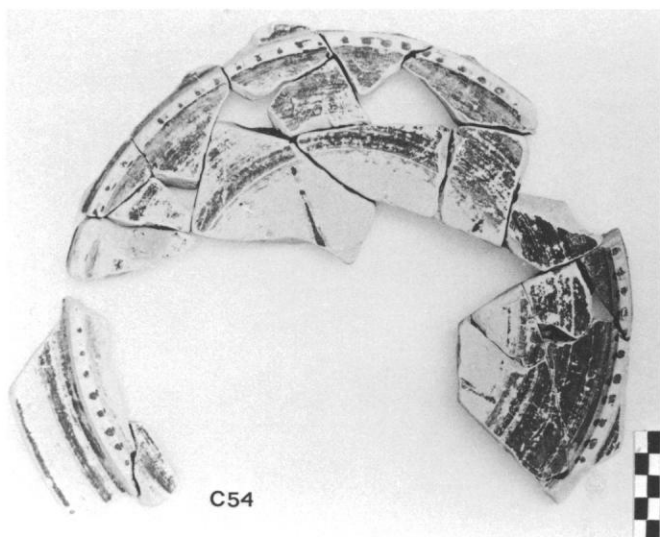
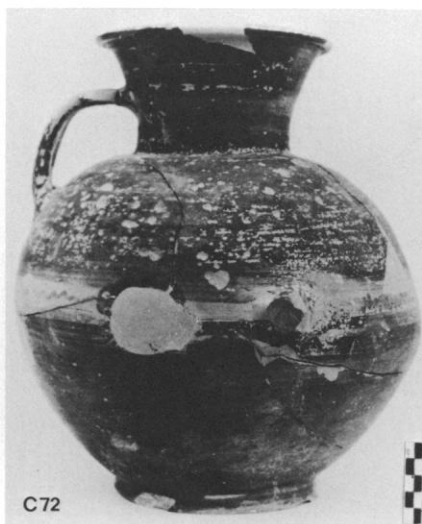


PLATE 30



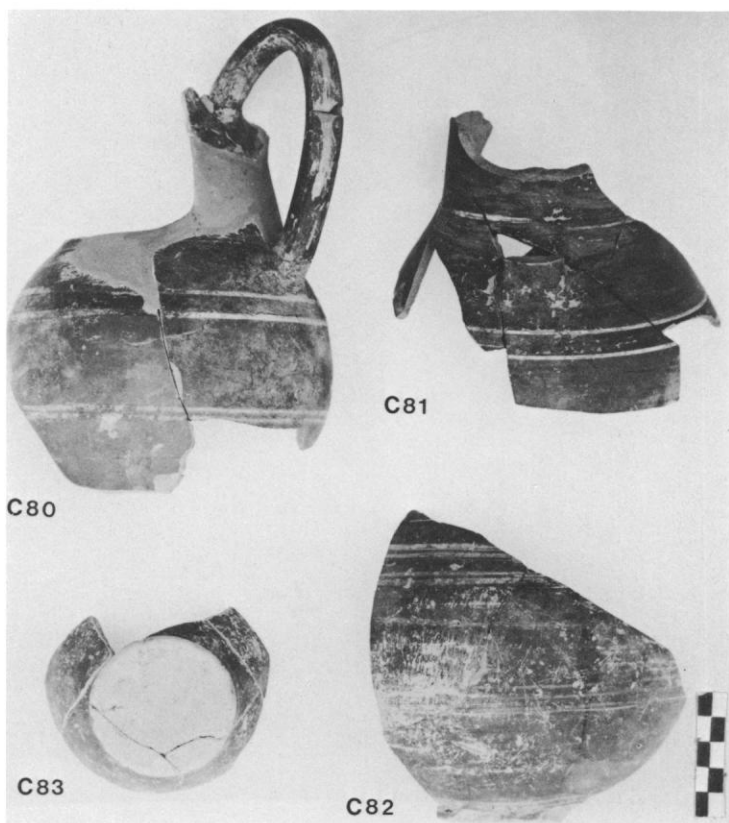
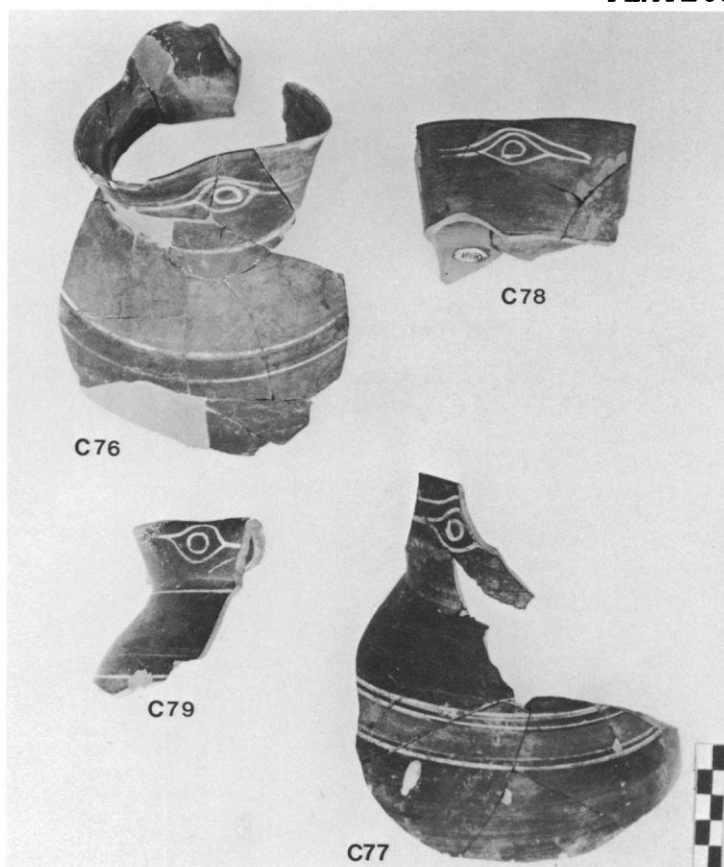
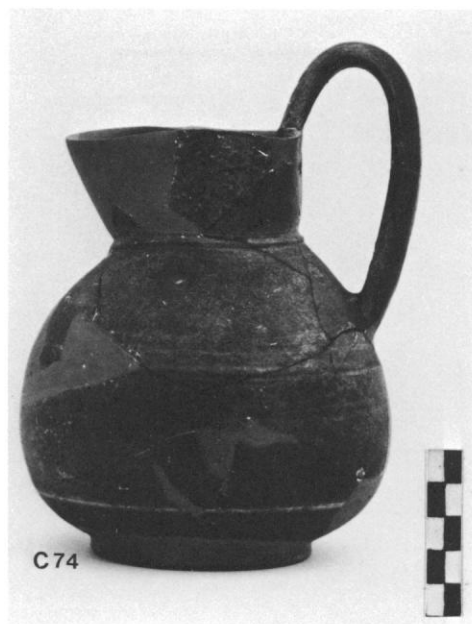
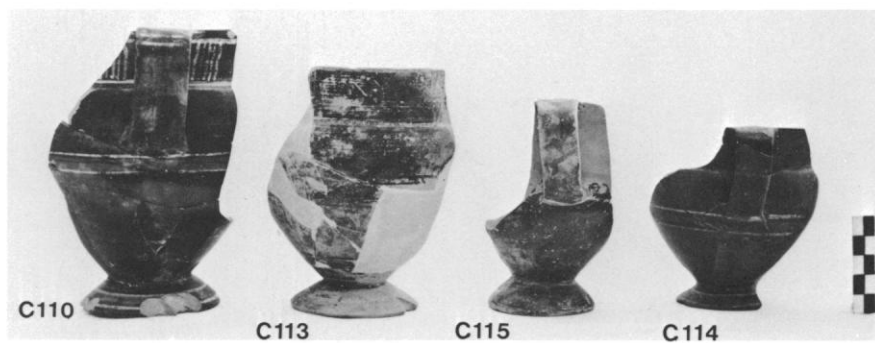
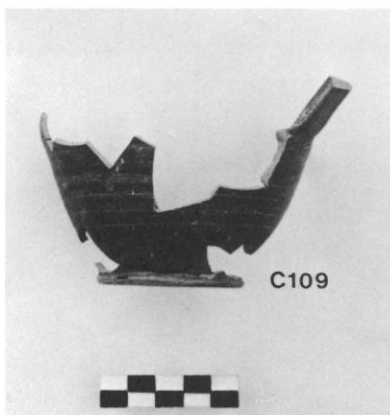
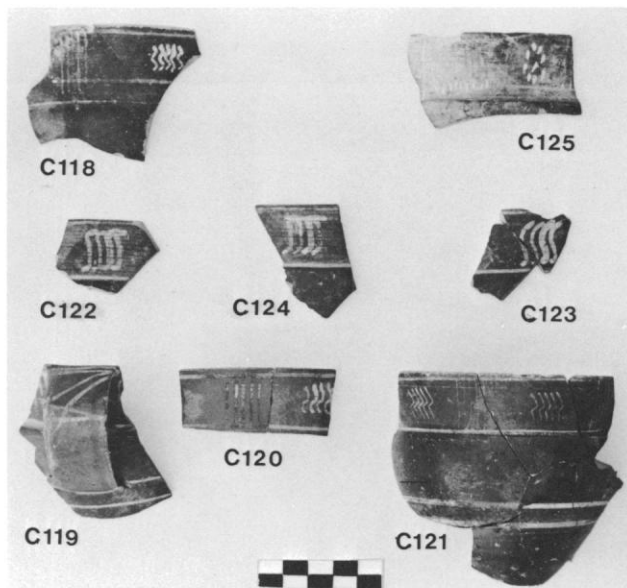
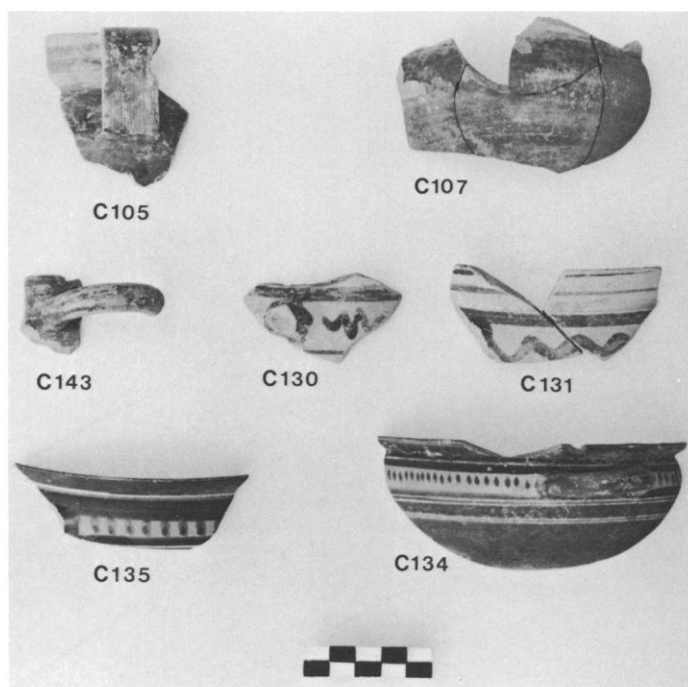
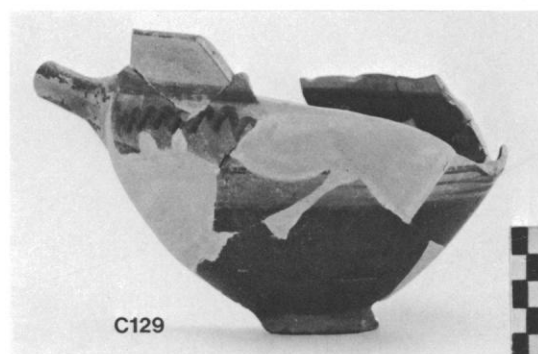
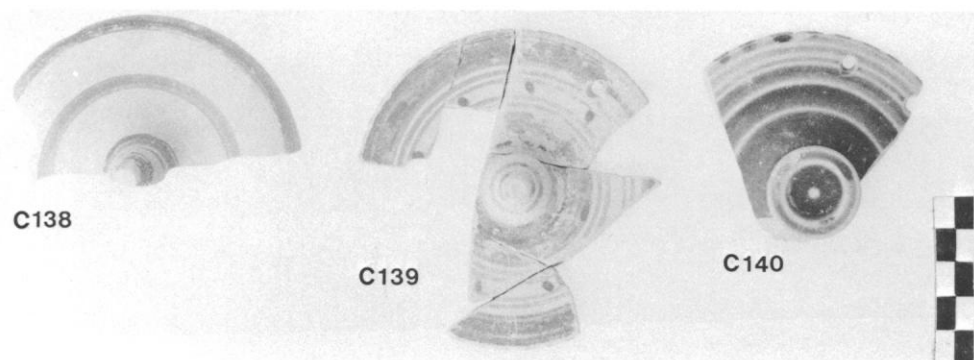
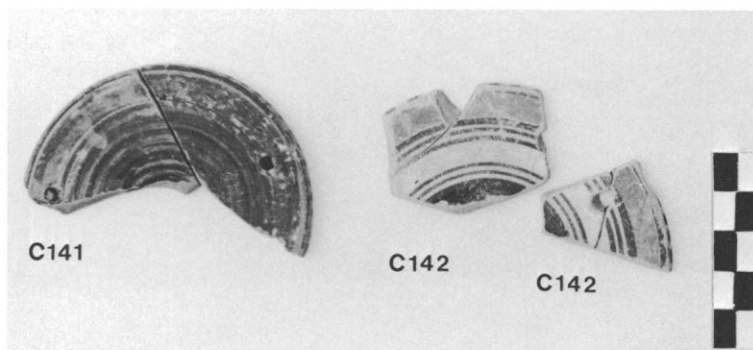
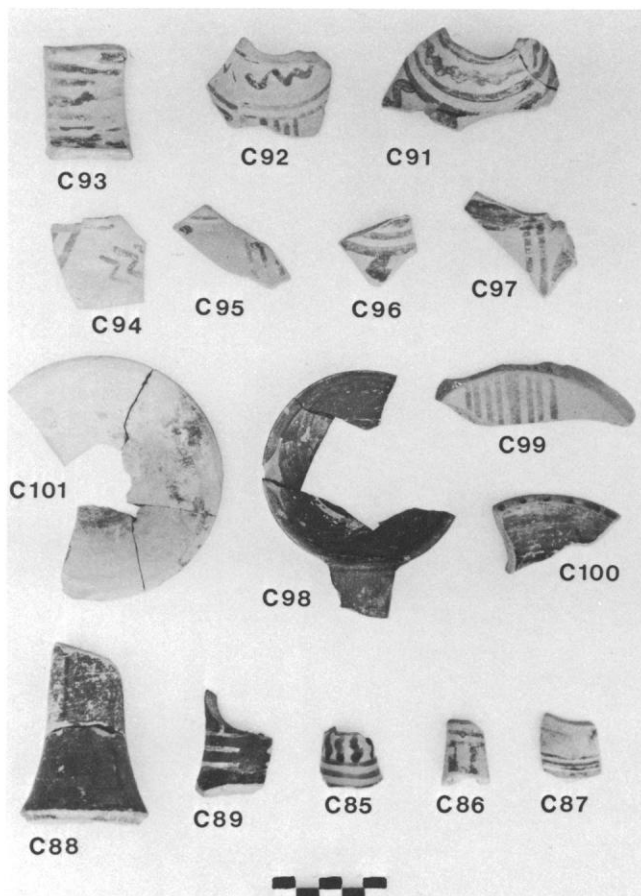
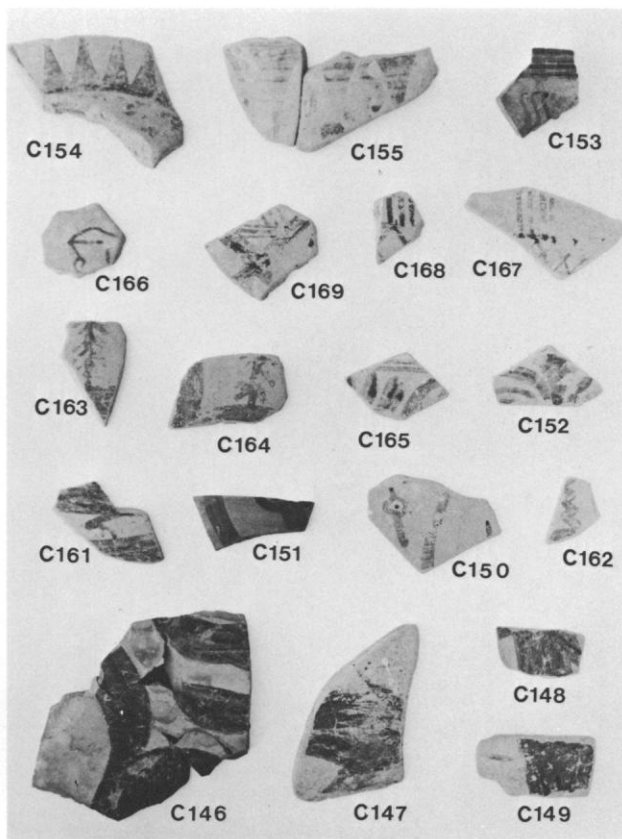
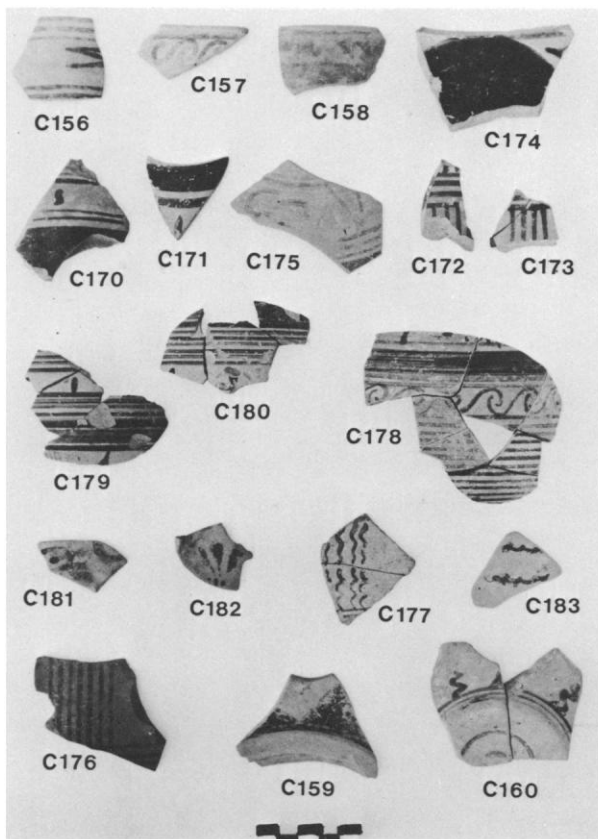
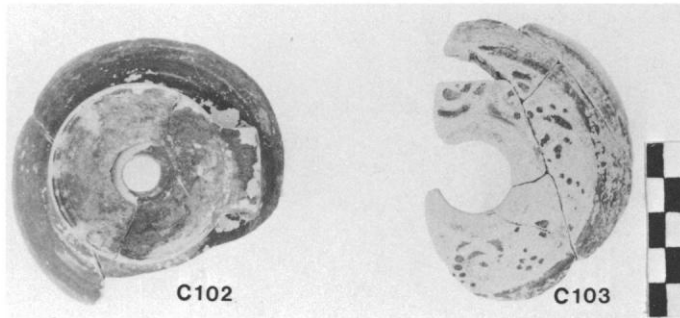
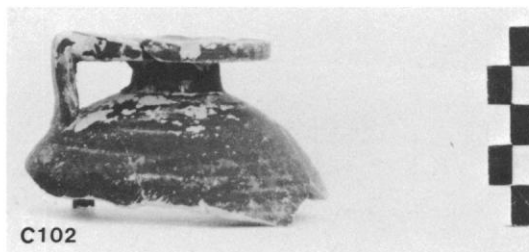


PLATE 32





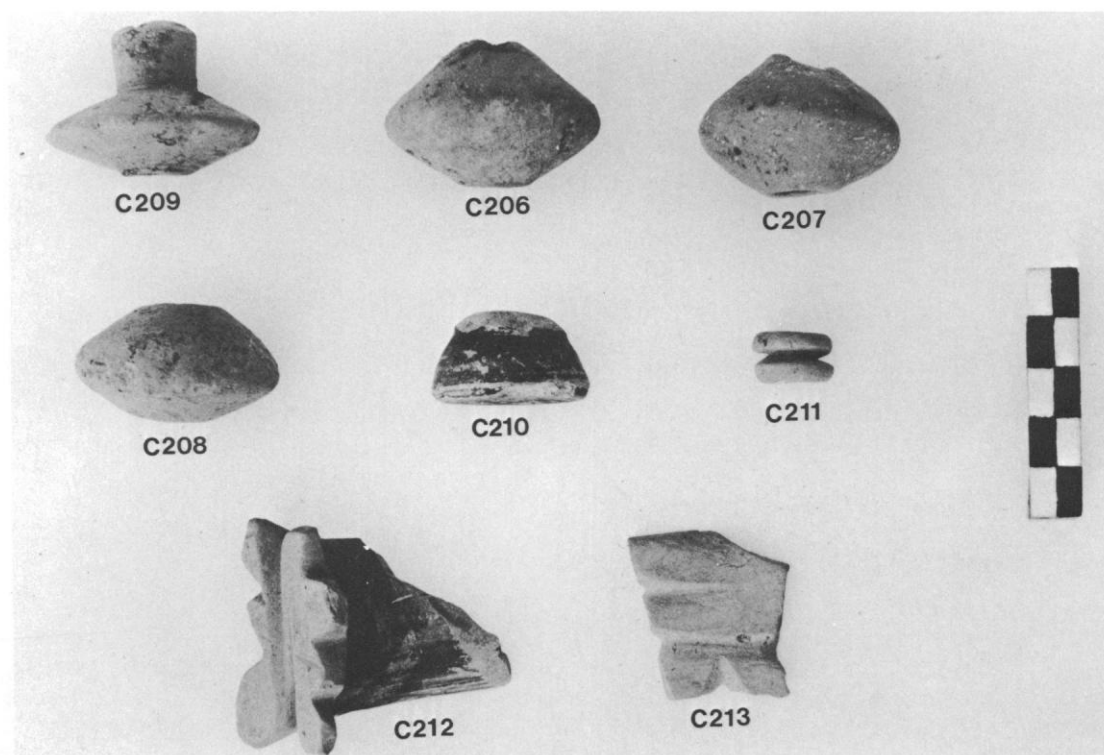
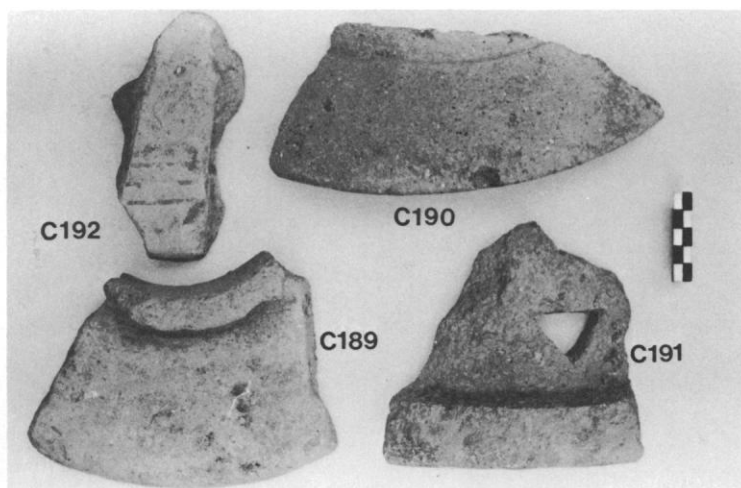
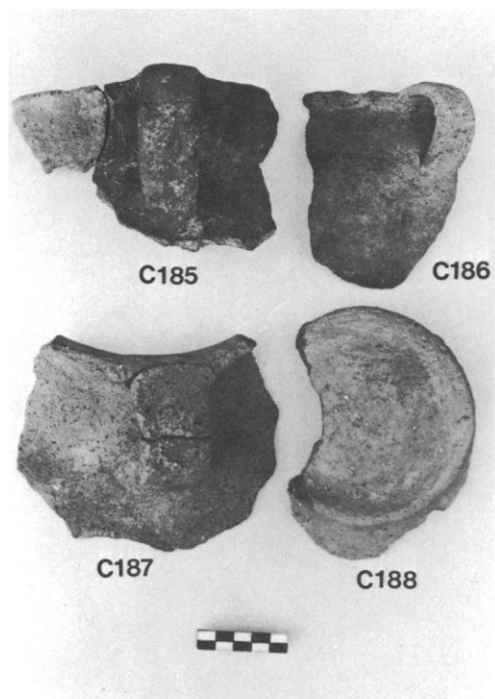




a.

b.

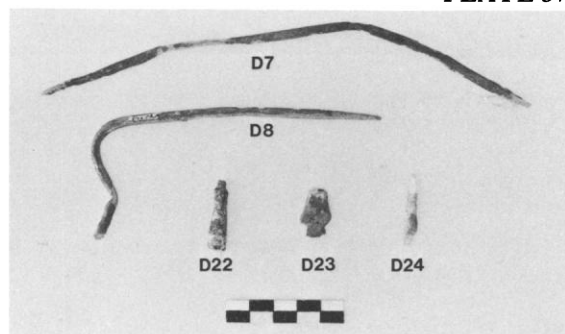
PLATE 36



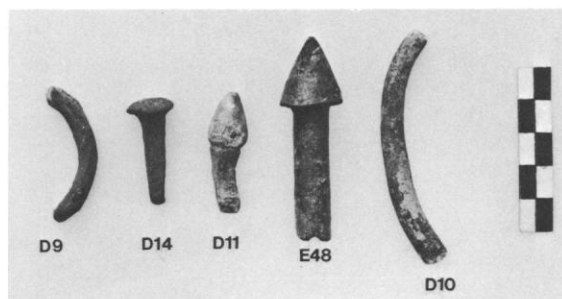
Archaic Coarse Pottery and Objects of Terracotta



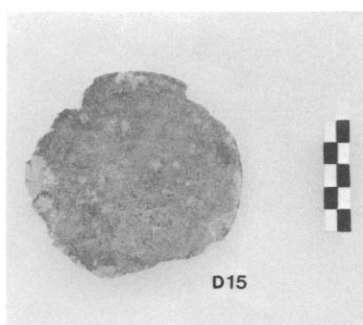
a.



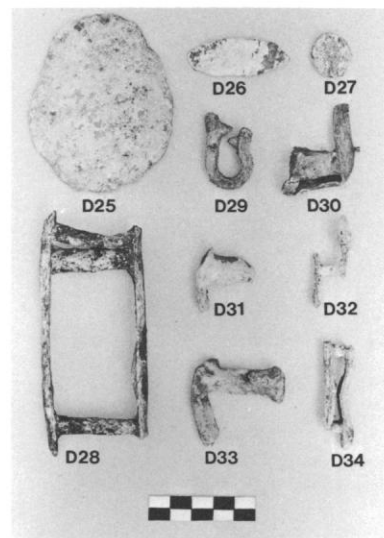
b.



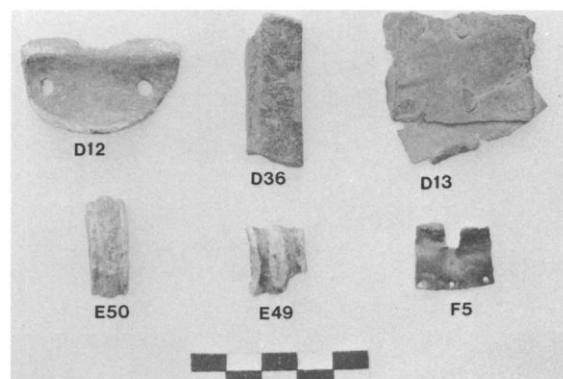
c.



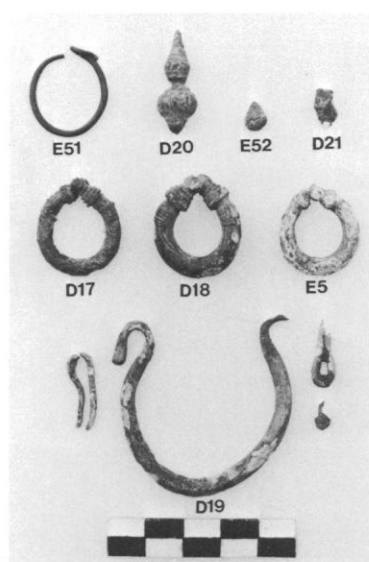
e.



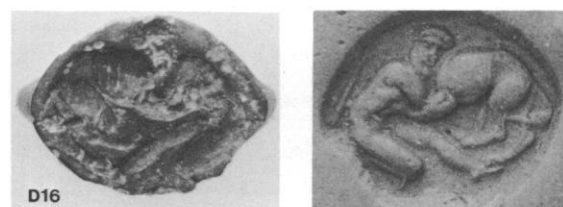
d.



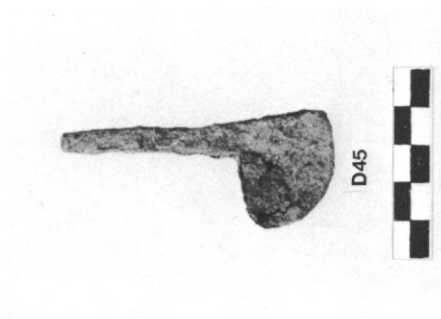
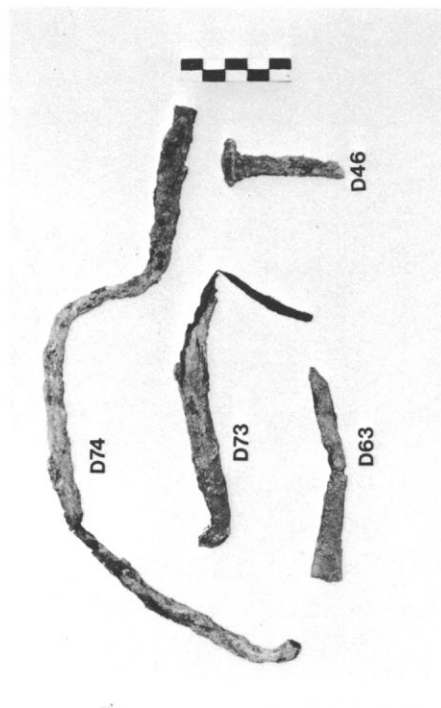
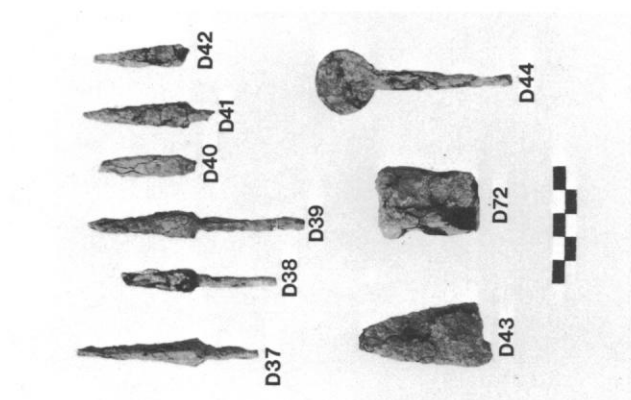
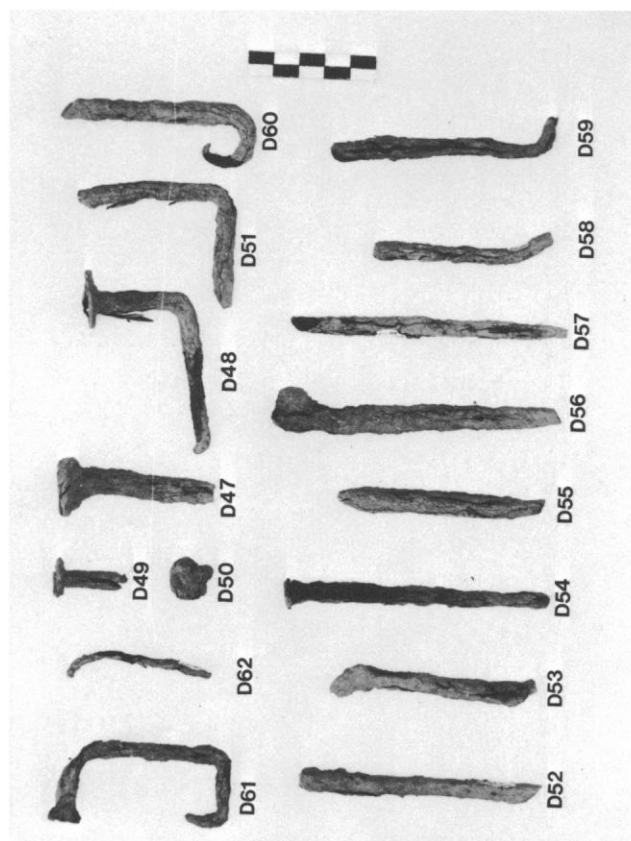
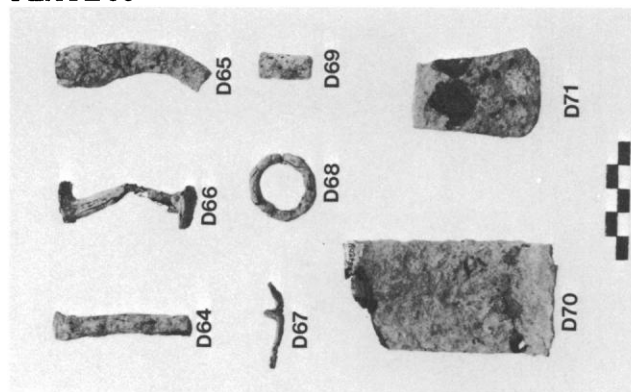
f.



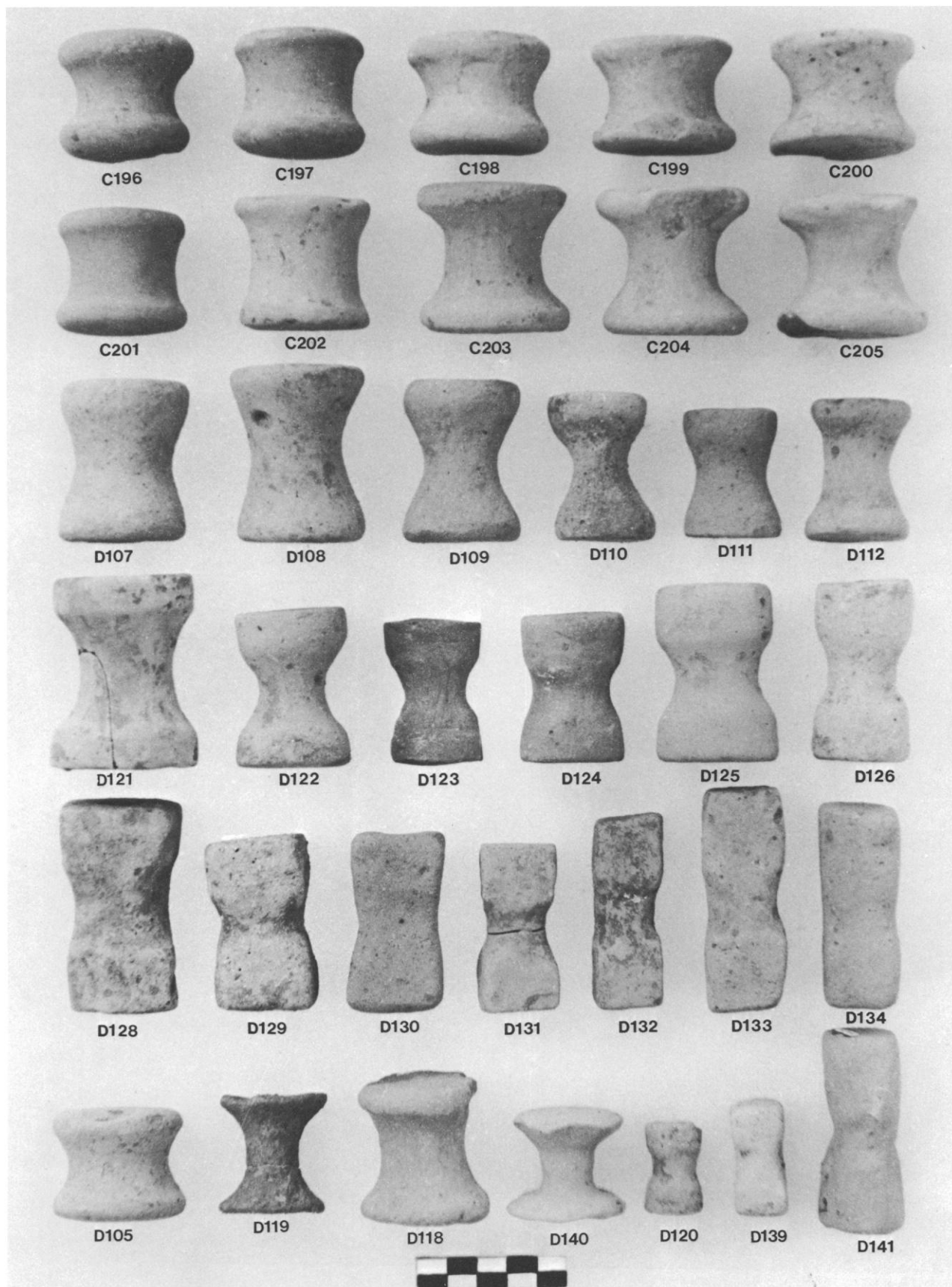
g.



h.

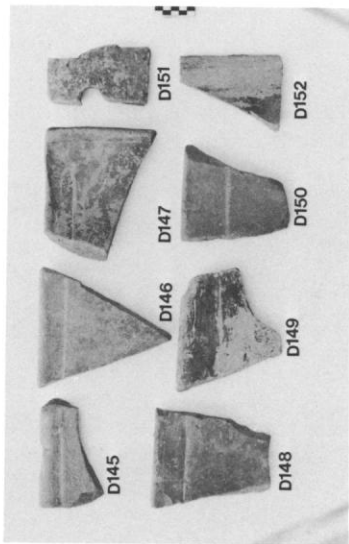
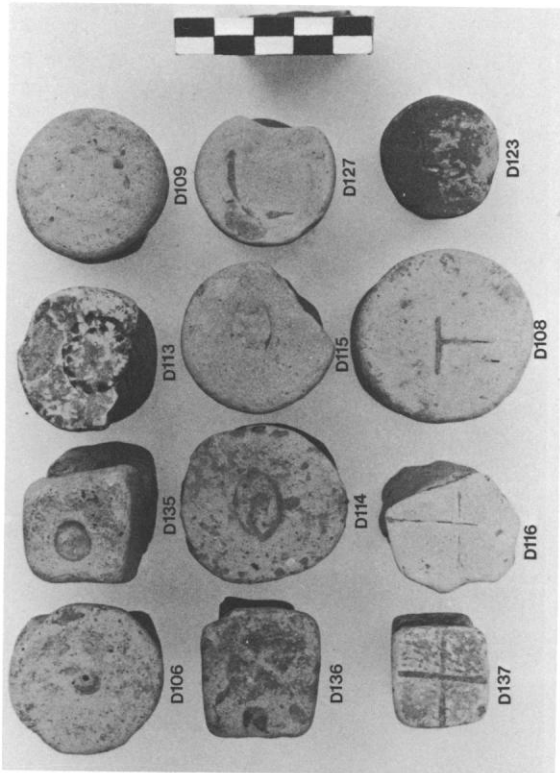
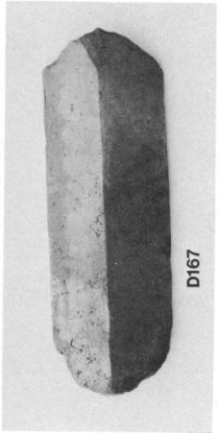
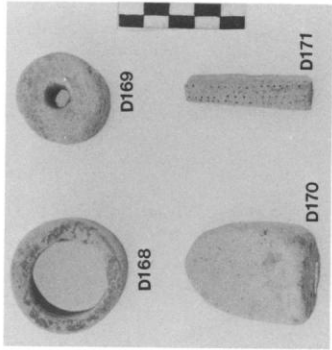
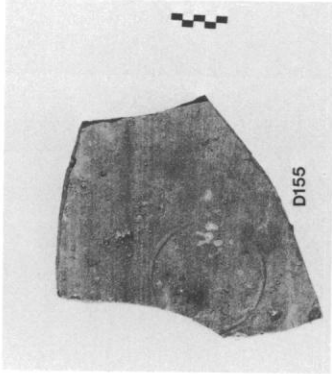
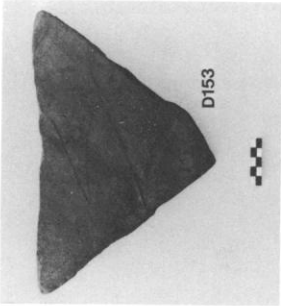


Classical Objects of Iron

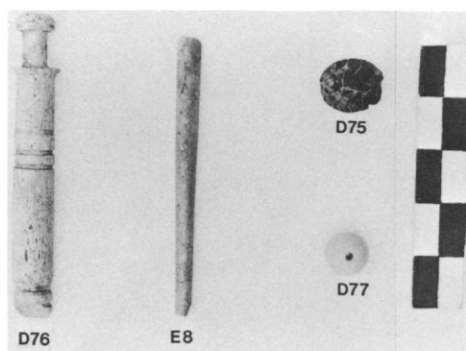


Terracotta Spoollike Weights

PLATE 40



Classical Terracotta Objects and Tiles



Classical Objects and Roman(?) Bone Pin (E8)

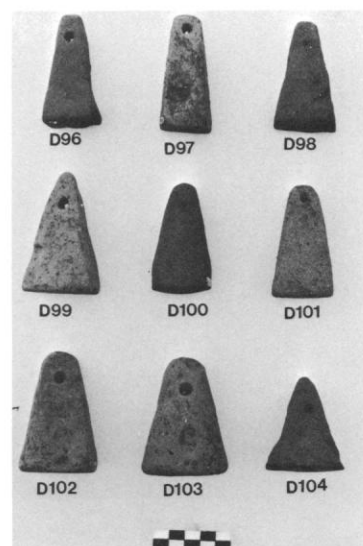
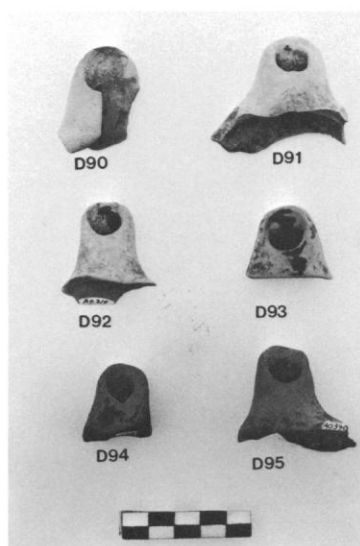
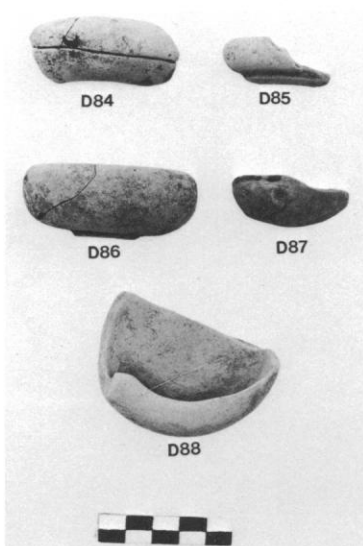
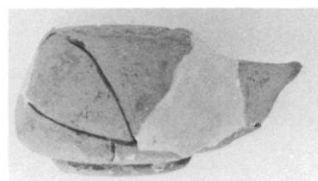
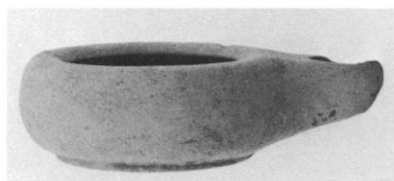
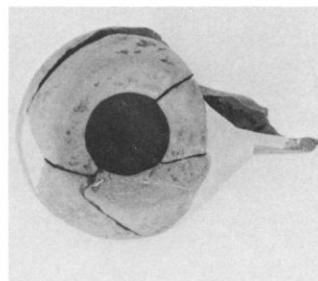
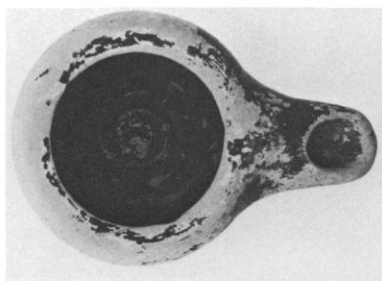
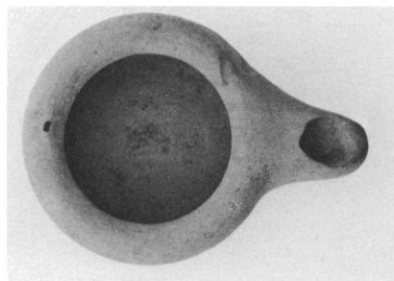
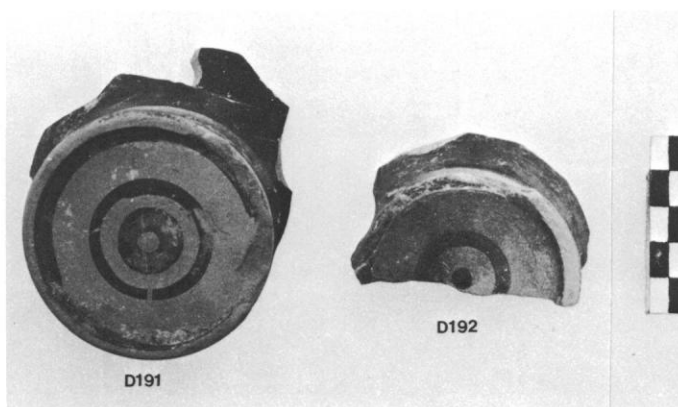
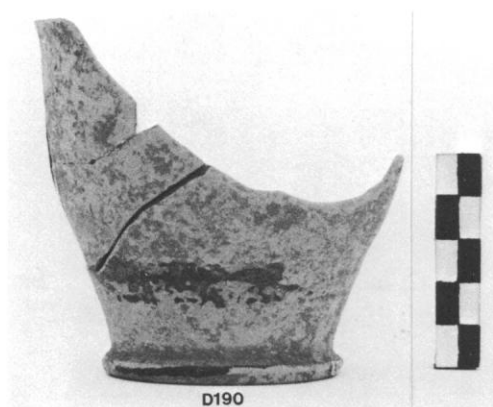
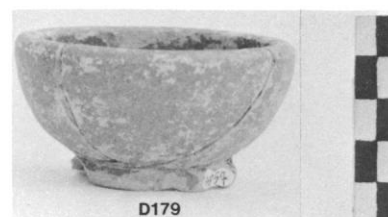


PLATE 42



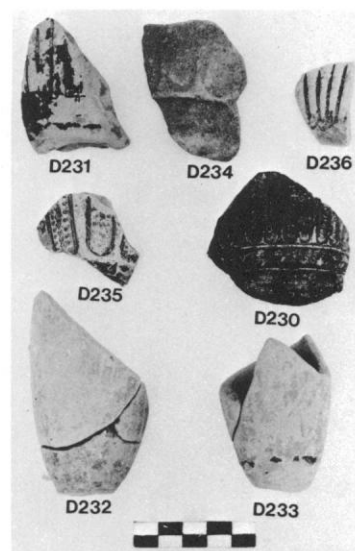
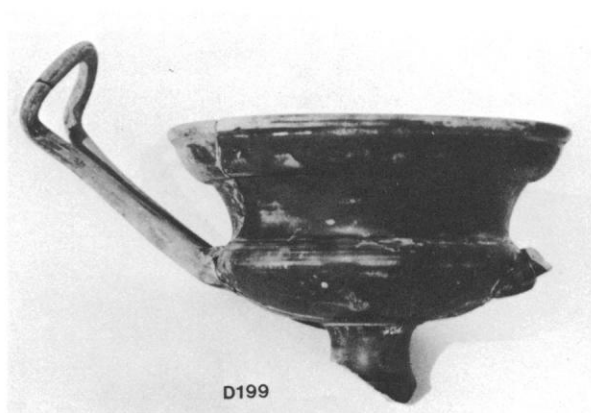
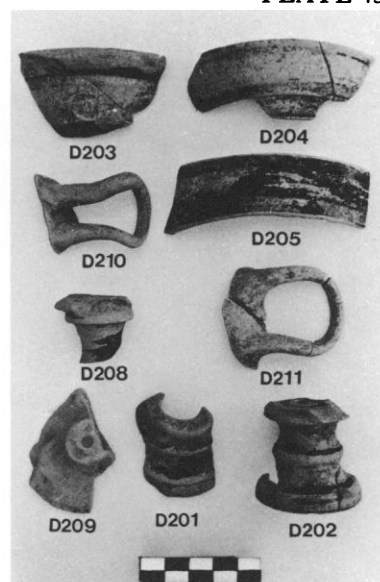
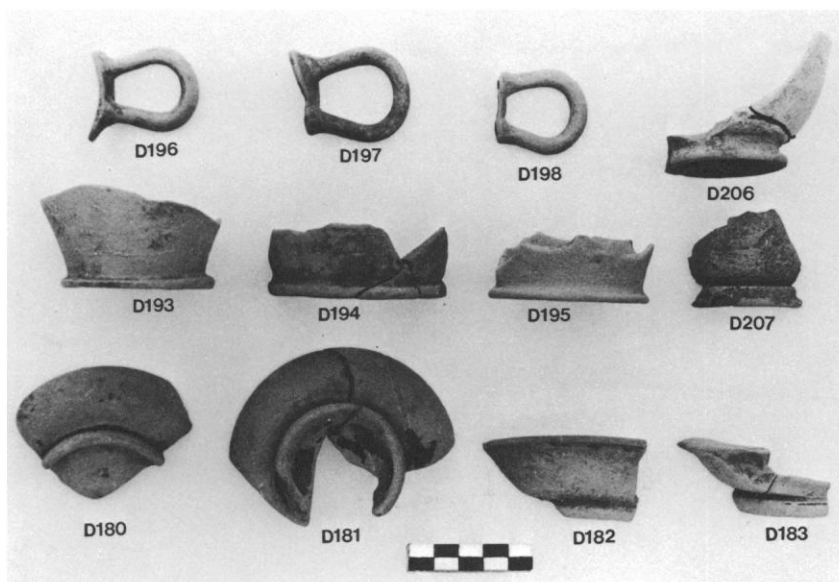
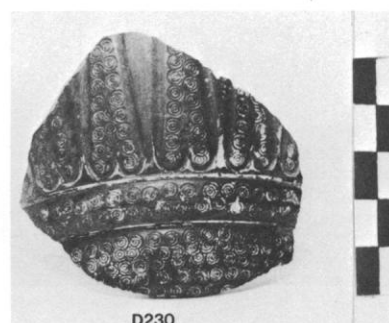
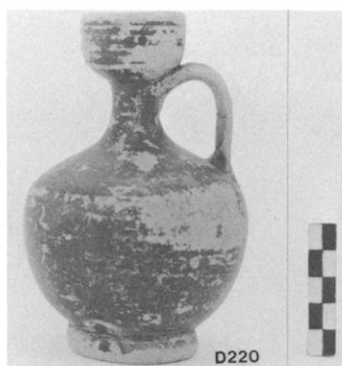
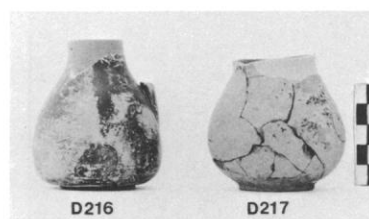
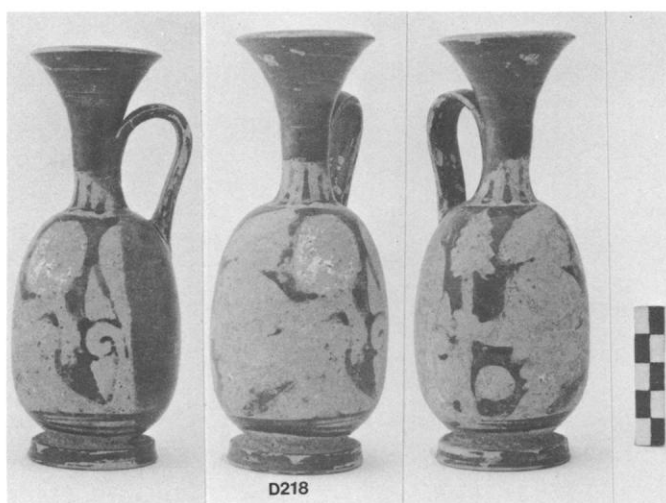
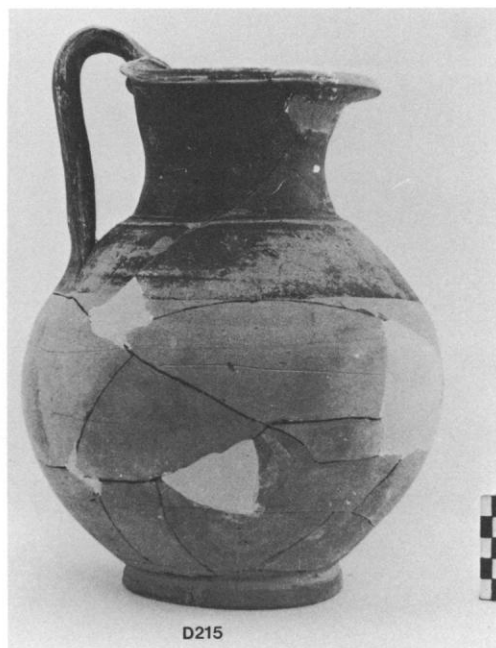
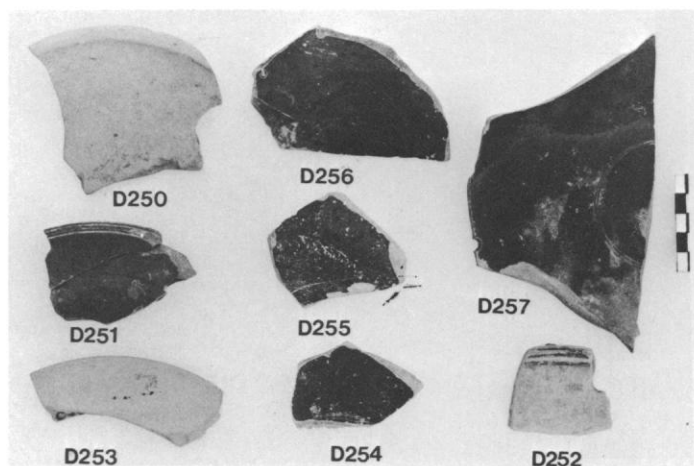
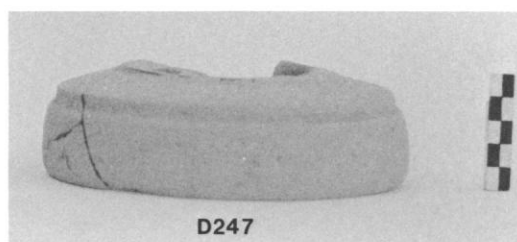
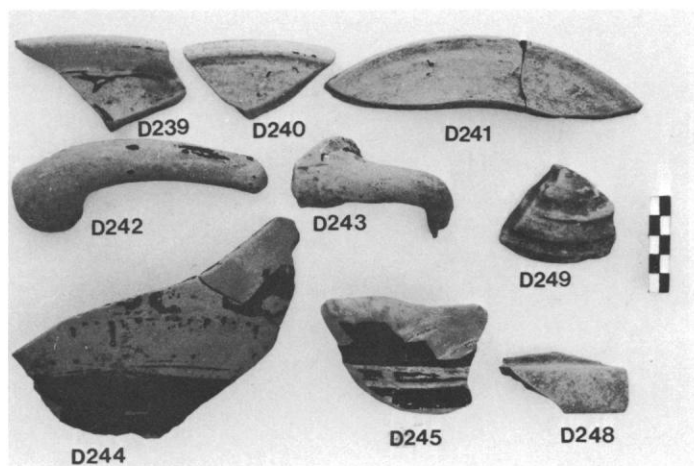
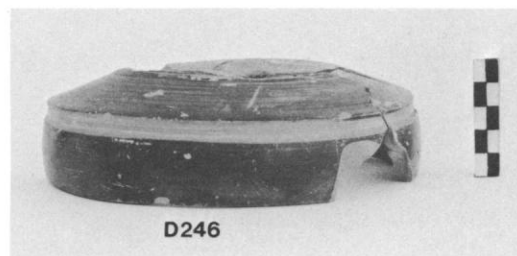
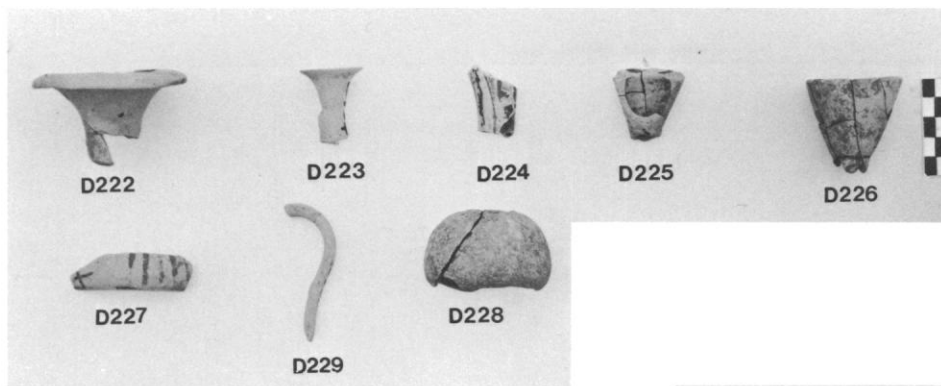
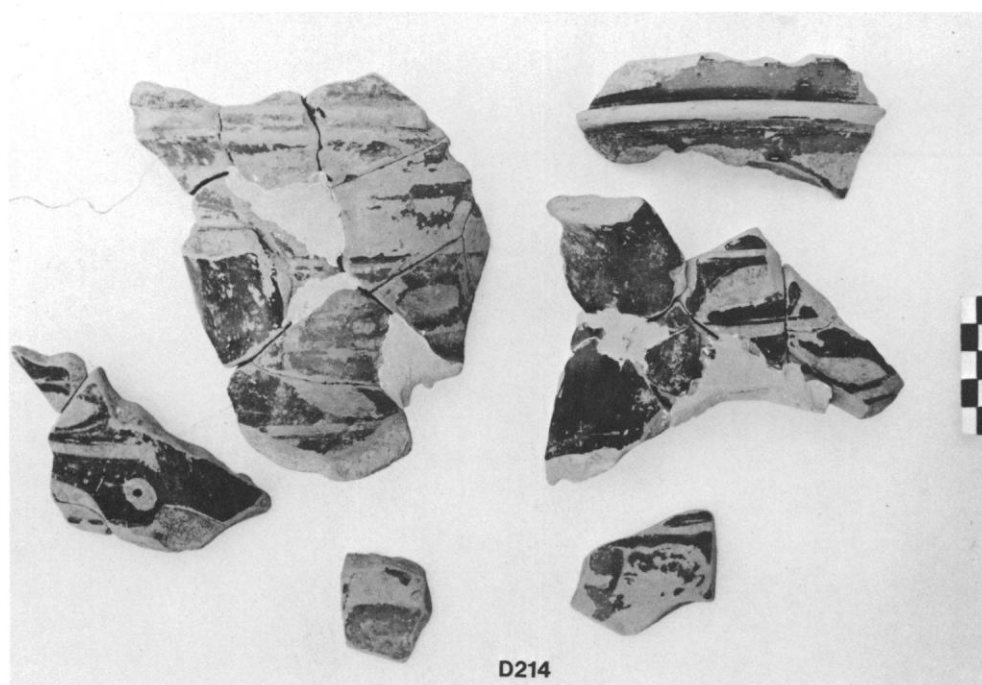


PLATE 44



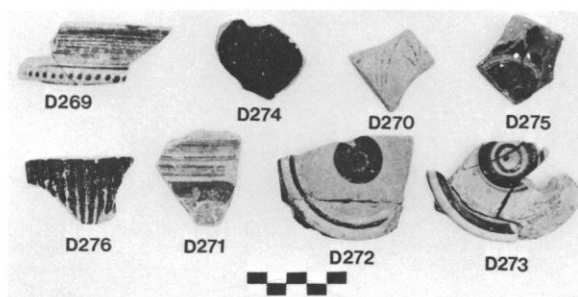
Classical Pottery



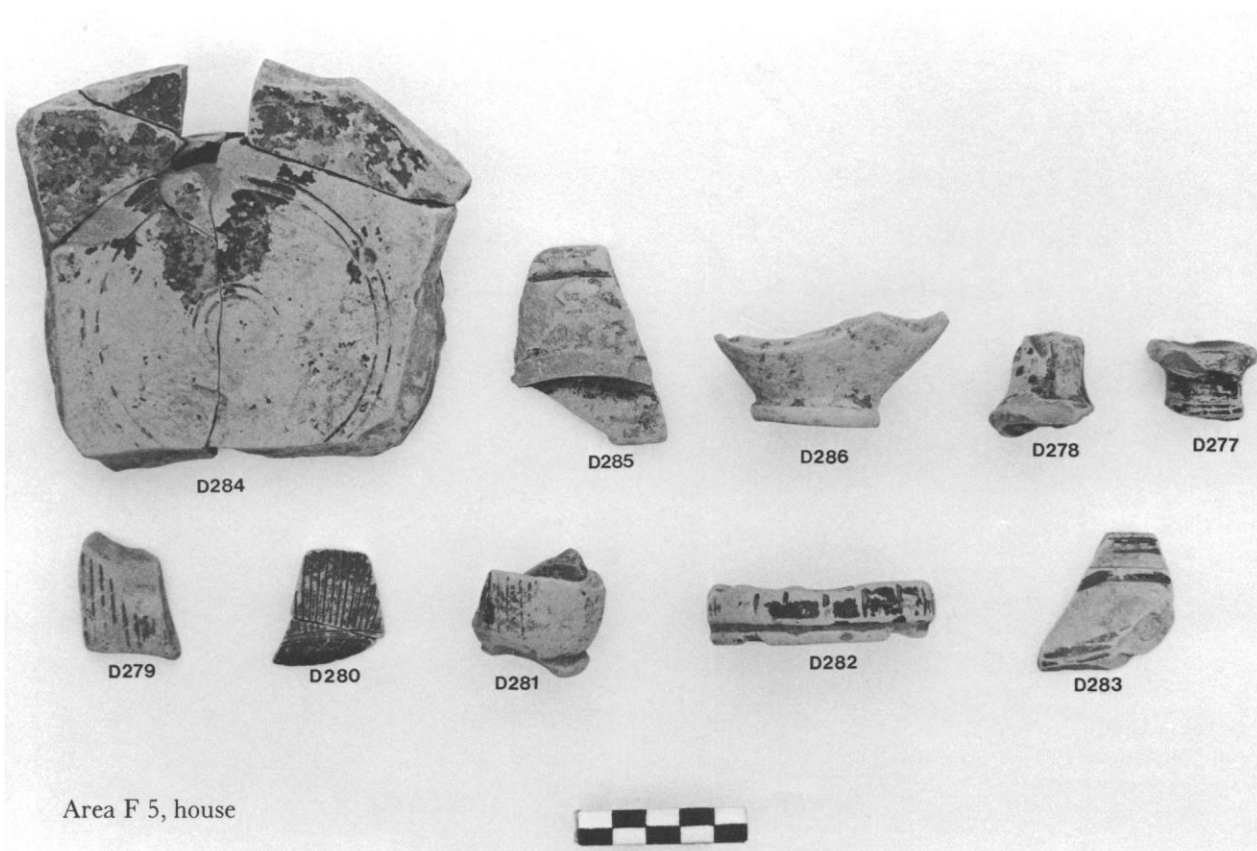




Area F 4, house



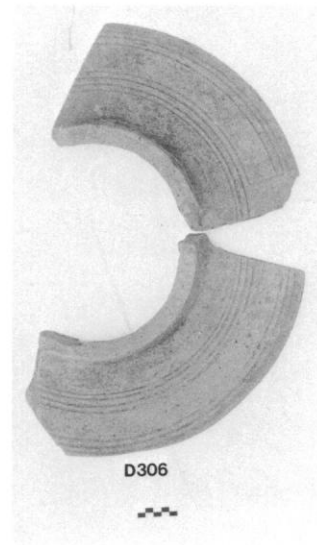
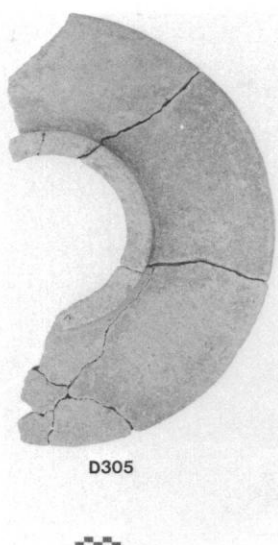
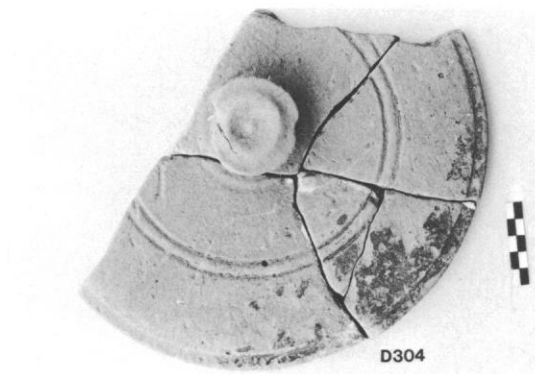
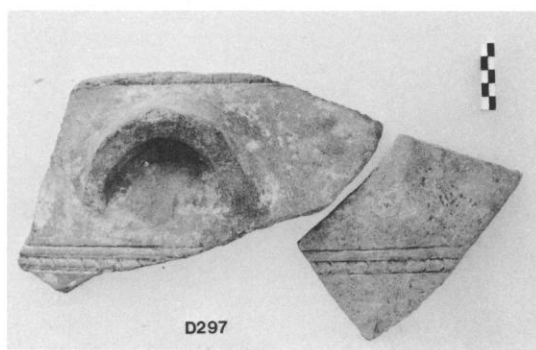
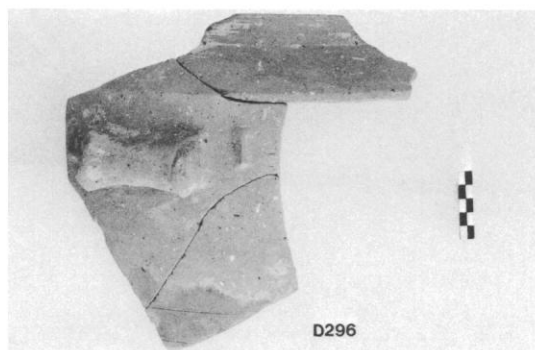
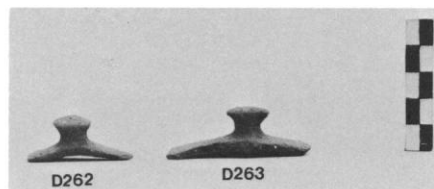
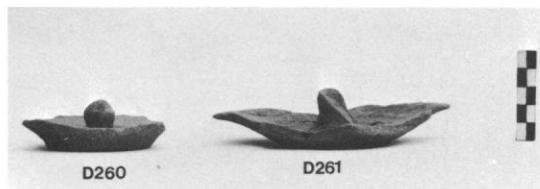
Area F 4, well



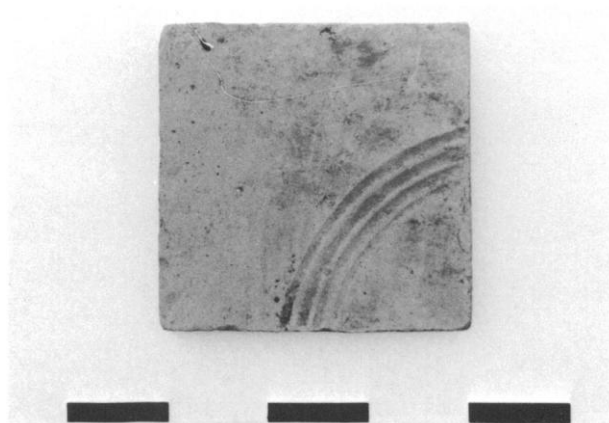
Area F 5, house

Archaic (D267–D271) and Classical Pottery

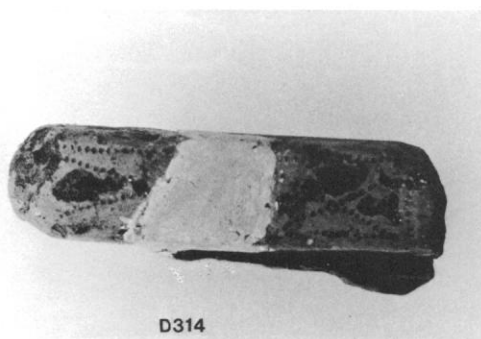
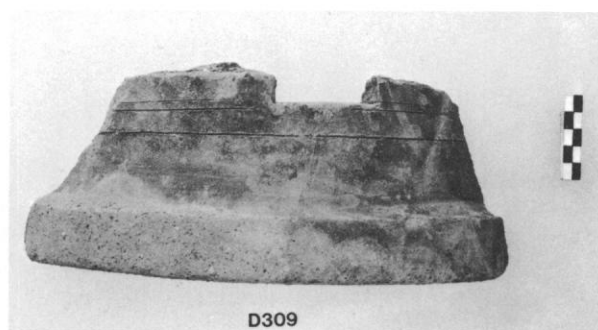
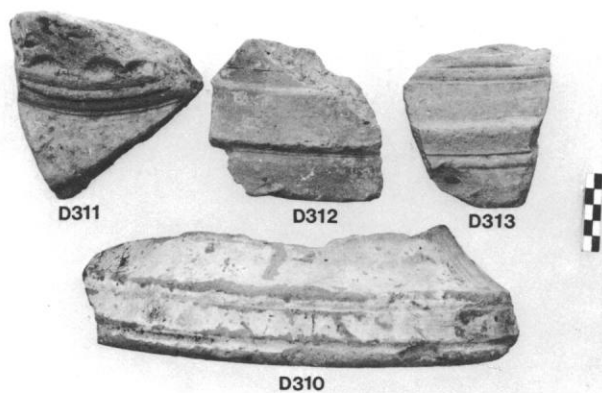
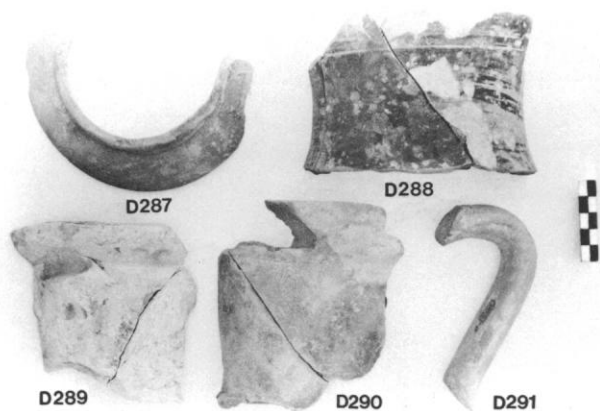
PLATE 48



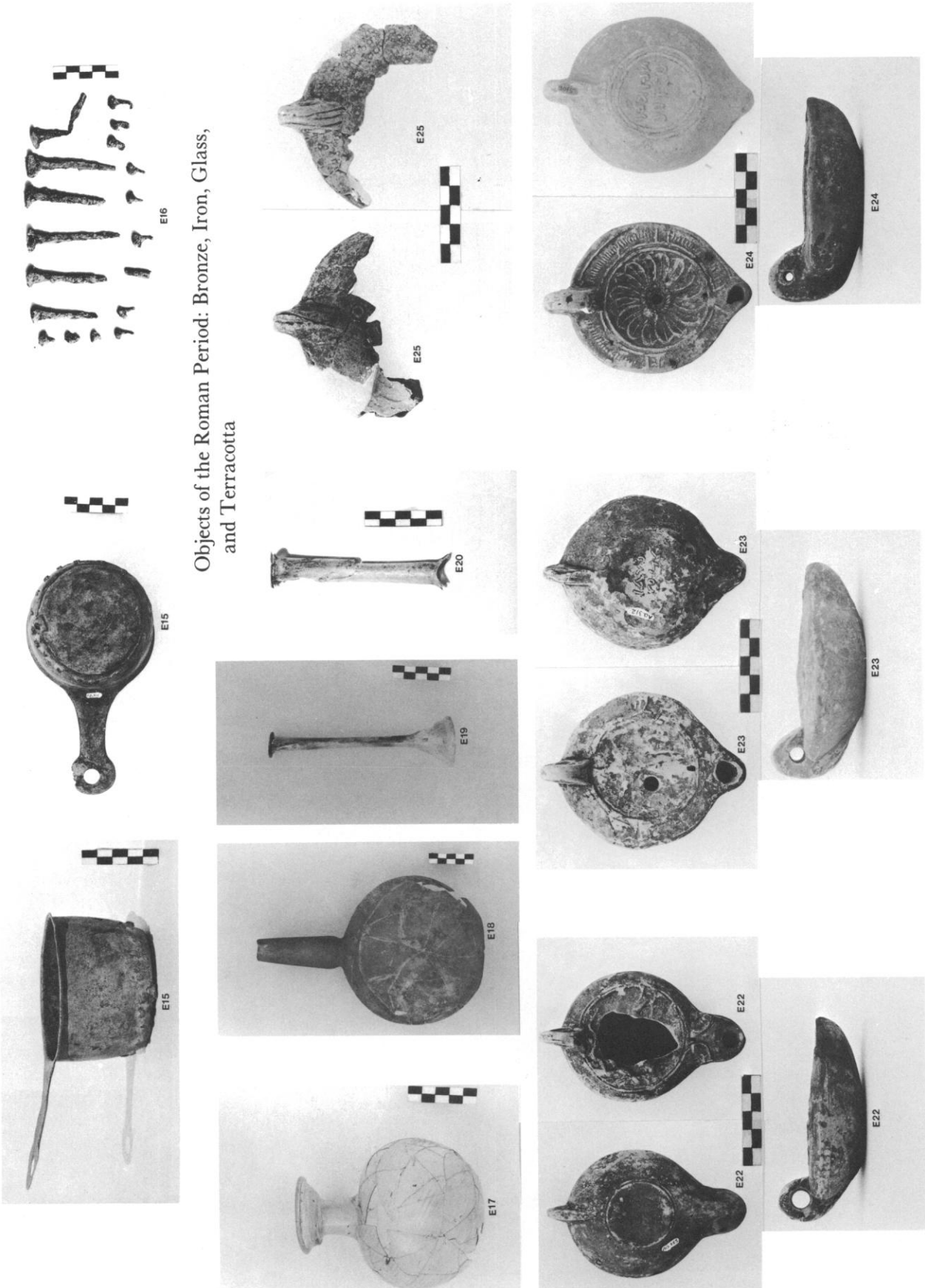
Classical Pottery



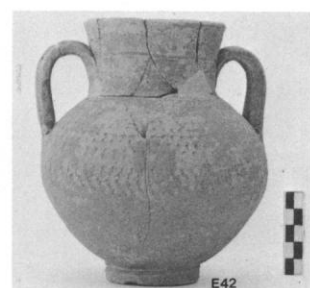
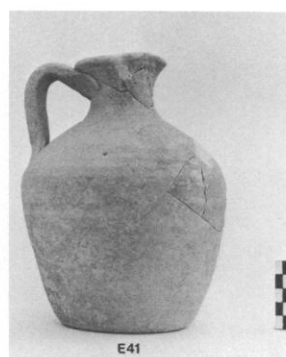
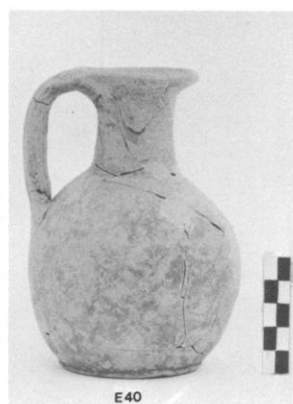
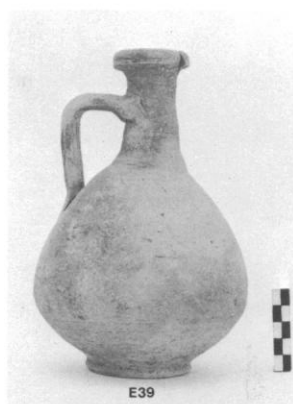
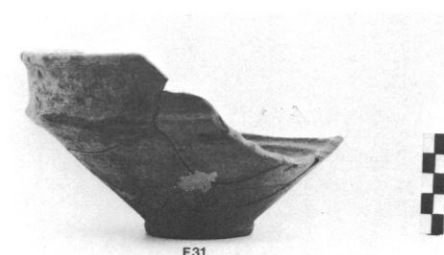
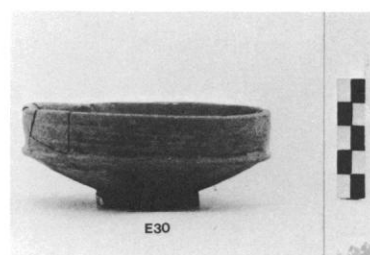
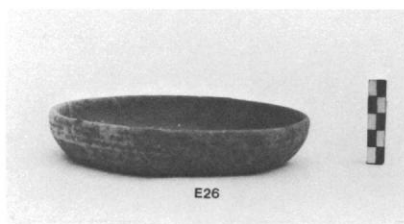
Terracotta tile of the Roman Period from Grave 12



Classical Pottery and Archaic Inscribed Fragment (D314)

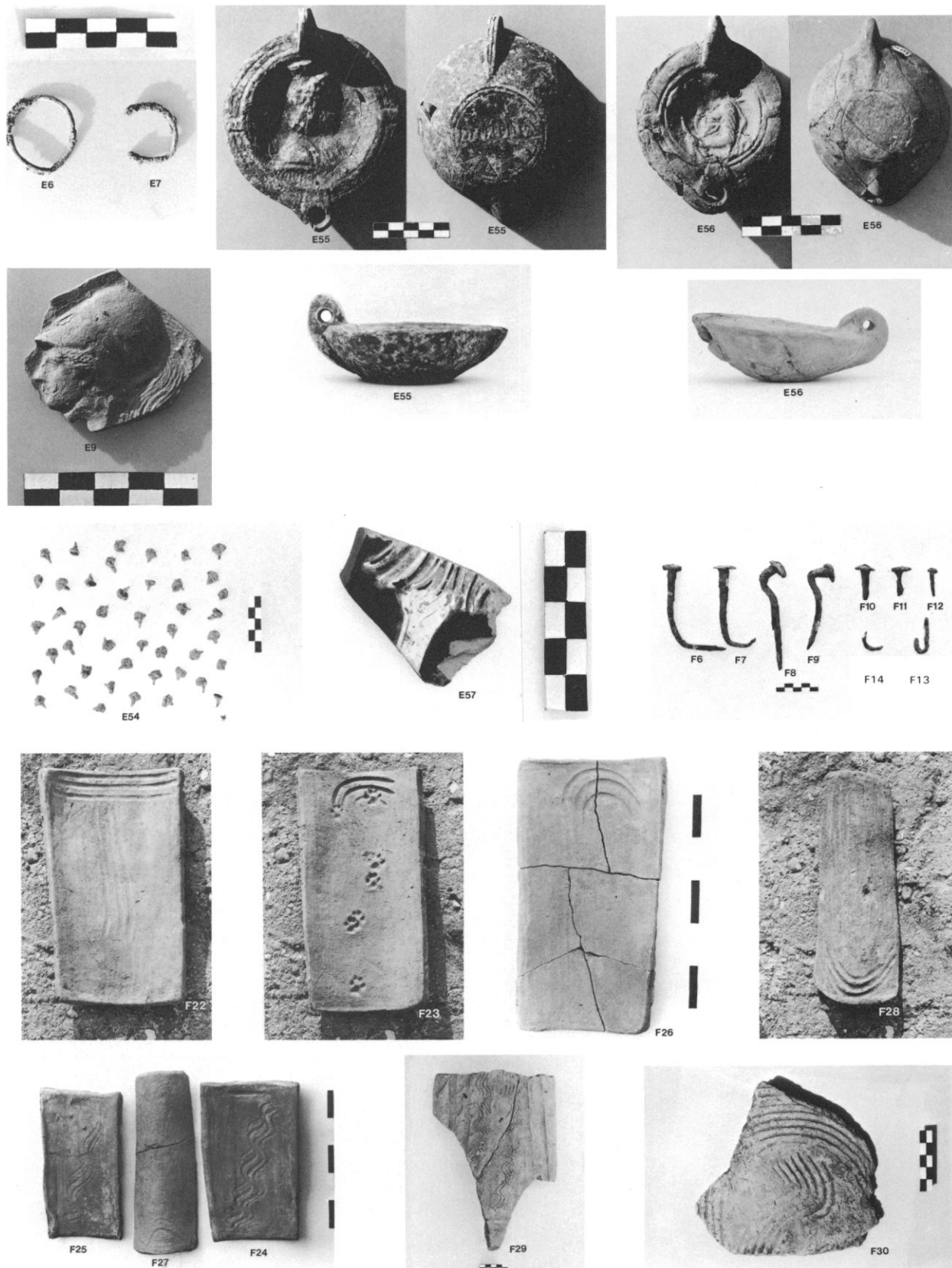


Objects of the Roman Period: Bronze, Iron, Glass, and Terracotta

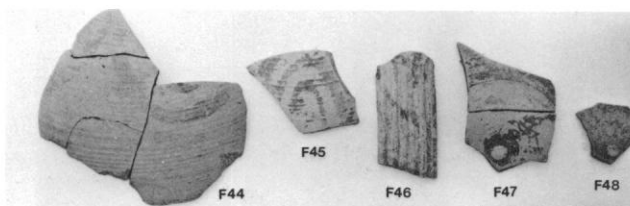
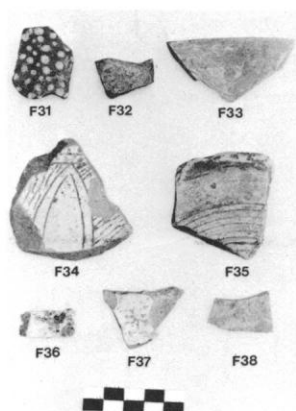
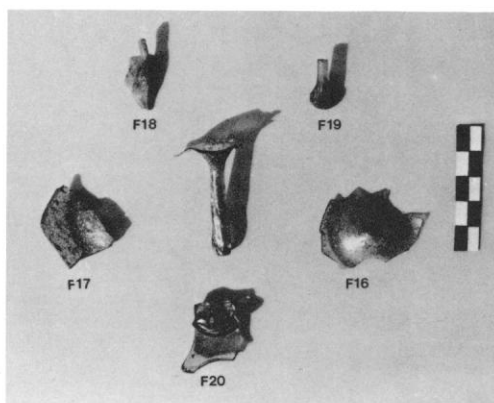


Pottery from Graves of the Roman Period

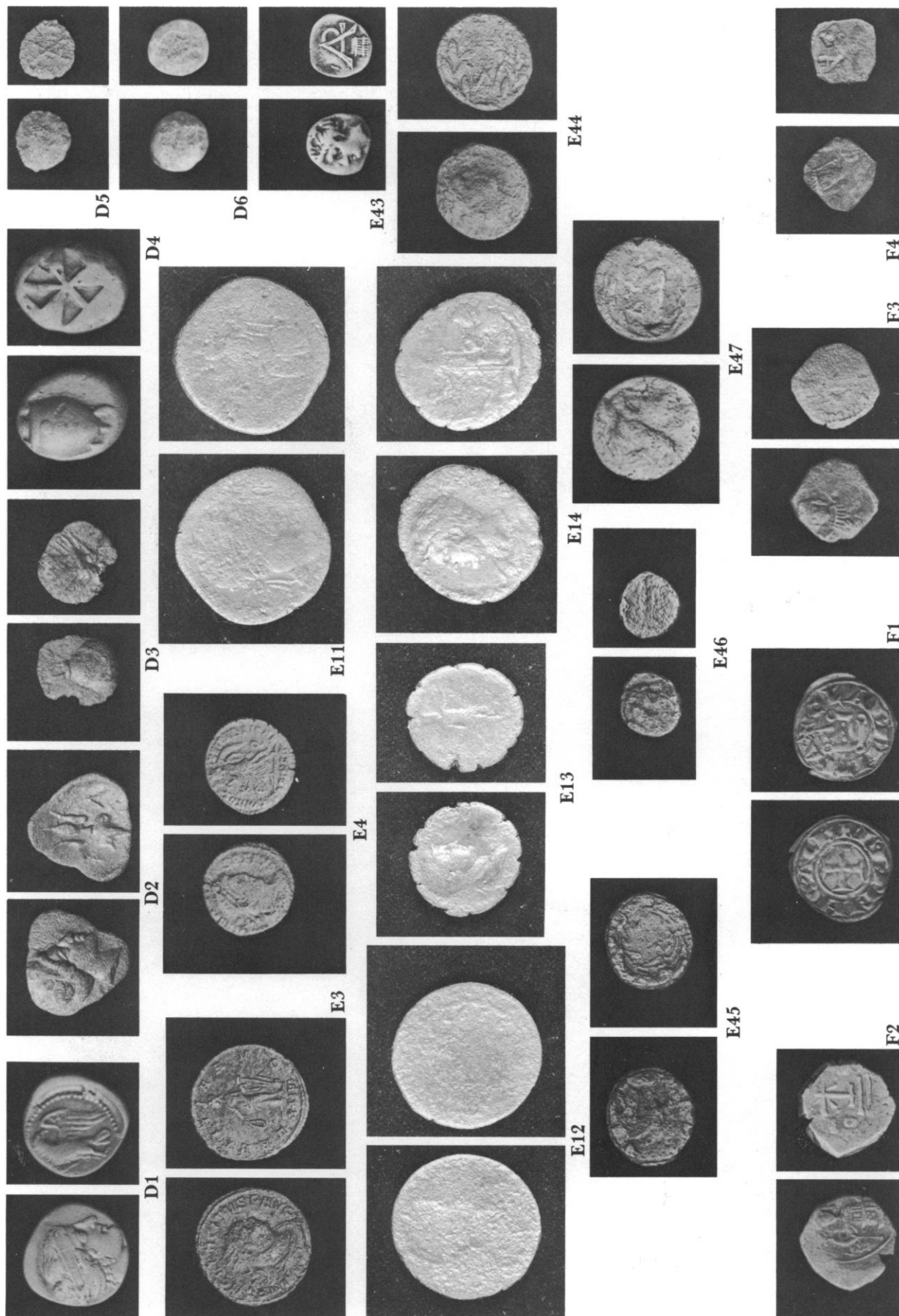
PLATE 52



4th-century(?) sherd (**E57**). Objects of the Roman and Byzantine or Frankish Periods



Objects and Pottery of the Byzantine or Frankish Period



Coins of various periods: silver, billon, bronze

Scale 1:1 except D2 and D3, 2:1